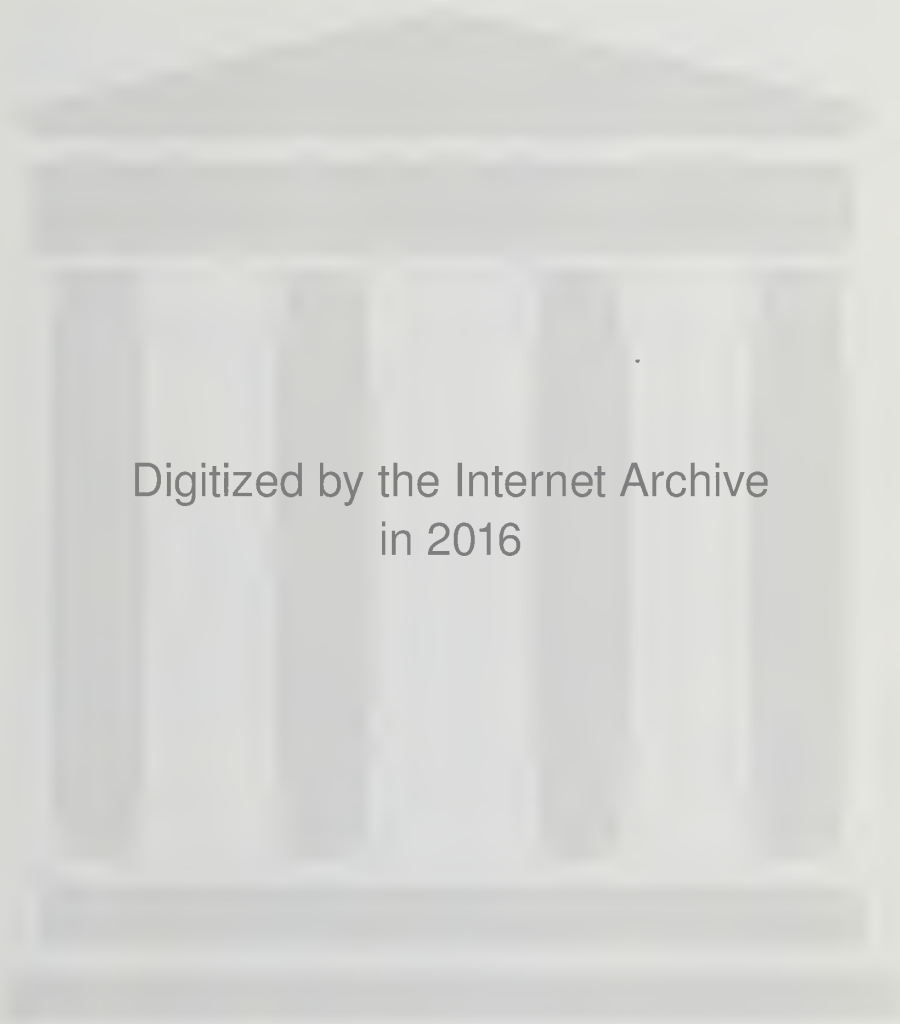
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JANUARY 1997 VOL. 90, NO. 1

EDITORIAL

Insurance Crusade 3
R.V. MCINTYRE, KINGFISHER

PRESIDENT'S PAGE

Political Participation—Review for 1997 5
D.L. HARPER, TULSA

SCIENTIFIC

Cellular Hemangioma of the Posterior Mediastinum: Unusual Presentation of a Rare Vascular Neoplasm 7
J.R. PARKER, C. KNOTT-CRAIG, K.W. MIN, W.J. UZELMEIER; OKLAHOMA CITY

SPECIAL

Alcohol Consumption Among Oklahoma Women: Before and During Pregnancy 10
S.J. CLOUD, K.M. BAKER, S.R. DEPERSIO, E.C. DECOSTER, R.R. LORENZ; THE PRAMS WORKING GROUP; OKLAHOMA CITY

Managed Health Care: A Concept Not Understood by Rural Oklahomans 18
C.F. ST.CLAIR, G.A. DOEKSEN, R.R. PERRY, M.J. RAUH, J.C. MOWEN; STILLWATER

NEWS

Telemedicine raises new liability concerns for doctors, 27... New endowed positions at OUHSC honor Rainey Williams, Doss Lynn, 27... Rural health association plans March meeting in Seattle, 28...

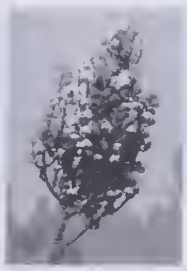
DEPARTMENTS

In Memoriam, 30... From the Oklahoma Poison Control Center, 30... Deaths, 31... Capsules, 32... Classifieds, 32... Instructions for Authors, 32... Alliance, 39... The Last Word, 40...

ABOUT THE COVER

Using a computer to apply special filters and dye sublimation techniques, Dr. Robert M. Smith, Oklahoma City, turned his photo of a roadside weed into a frosty winter masterpiece.

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FOR TEN YEARS

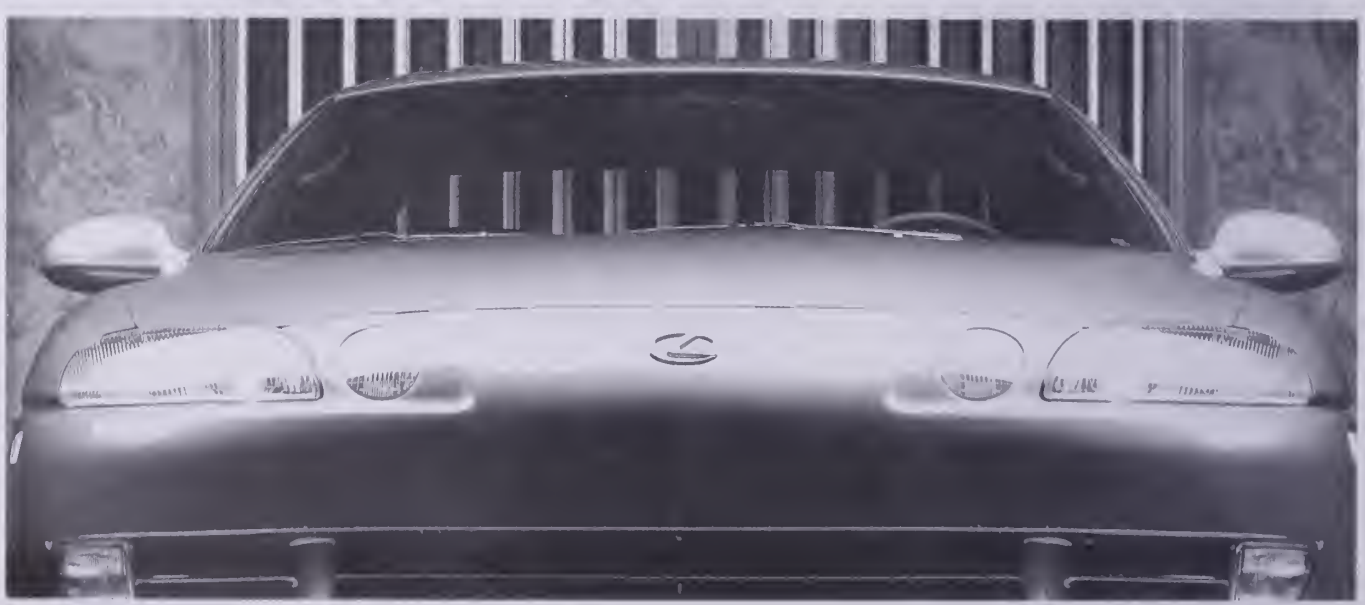
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Insurance Crusade

There was once a time in the evolution of medical economics in America when the health insurance coverage of the sick and injured citizen was only one of several resources to be mobilized in funding health care. However, the fashion of today to make the sick and injured more dependent on the government and on the employer has led to a withering of indemnity insurance and a growth of dependency health insurance such as preferred provider contracts, HMOs, and capitation devices.

Unfortunately, in a pool of human insureds, the resultant dependency reduces the patient rapport below a critical level of fiduciary responsibility. Thereupon the quality of care decreases and the principal aim of the plan subtly shifts to making money rather than to the provision of a service. The appropriateness of care is often sold off to turn a profit for the plan.

That our society's concept of acceptable health insurance has degenerated to barbaric levels is signaled by the passage of "Drive-Through Delivery" bills to forbid insurance companies from discharging newly delivered mothers from the hospital. Both the U.S. Congress and the Oklahoma State Legislature recently enacted such laws.

These new legislative mandates do nothing about newly operated cancer cases, evolving strokes, or newly stented coronary patients, yet the third parties are insisting on deciding where and for how long these patients are to be treated. There is a long list of diseases and procedures that require a physician's evaluation of the patient's individual resilience to diseases that are variably aggressive, and statistical probabilities can never be sufficiently accurate to decide the fate of living patients.

The insurance industry is also currently reaching aggressively for the control of the credentialing of physicians. Using the leverage generated by their dependent policyholders, insurance contractors are manipulating medical economics and specialty credentialing of their "preferred provider physicians" for the monetary benefit of the insurance companies. Quality of patient care often can be traded off for cheaper doctors. Economic credentialing and specialty certificate whipsawing now can be used by many insurance contractors who are in control of "captive" policyholders who no longer have the right to select their own physicians.

The time is upon us when the medical profession must unite and act in concert to deal with the insurance contractor's control of physician credentialing. The threshold criteria for the practice of medicine must be determined by patient requisite and not to make money for insurance companies.

Kay V. McIntyre, M.D.

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Political Participation—Review for 1997

It is a new year, and the Oklahoma State Legislature and United States Congress will soon start new sessions. Special interest groups will continue to put pressure on state and national legislators to institute changes that may seriously affect the delivery of high quality healthcare. Allied medical personnel will press for an ever-increasing role in healthcare delivery. Managed care, public health, and scope-of-practice issues are ever present and threaten to further change the way we practice medicine. It is imperative that we not become complacent and that we continue to make our views known, stressing quality patient care and not just financial aspects.



Listed below are avenues of political participation followed by ways to contact your Senator and Representative. Let's work together to make the Oklahoma State Medical Association a political force to represent our patients and physicians for the improvement of healthcare in Oklahoma and the United States.

1. One-on-one grass roots communication—maintain a line of communication with your state and national Senators and Representatives by phone calls, letters, and faxes when needed.
2. Support OMPAC and the organized medicine political agenda by your financial contribution.
3. Participate in the Doctor of the Day program so we not only will provide a service but will also have a daily presence in our state legislature.

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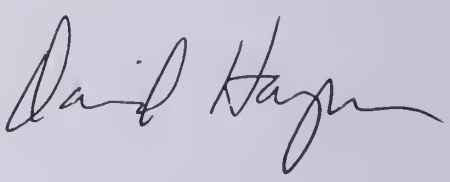
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Cellular Hemangioma of the Posterior Mediastinum: Unusual Presentation of a Rare Vascular Neoplasm

John R. Parker, MD; Christopher Knott-Craig, MD; K.W. Min, MD; William J. Uzelmeier, MD

Cellular hemangiomas arising in the posterior mediastinum (or paravertebral sulcus) are rare tumors even in childhood. We report one such tumor which arose within a sympathetic ganglion in an infant with associated congenital heart disease (ventricular septal defect) and severe congestive heart failure. The tumor was discovered incidentally at cardiac catheterization when tumor blush was observed in the apex of the left chest. This benign mass was completely resected prior to repair of the cardiac defect. We speculate that it may have contributed to the congestive heart failure.

Posterior mediastinal tumors in children usually are of neurogenic origin, and may be either benign (e.g., neurilemomas, neurofibromas, and enterogenous cysts) or malignant (e.g., neuroblastomas, pheochromocytomas, and sarcomas). Although uncommon, vascular neoplasms should also be considered. Cellular hemangiomas are a subgroup of benign vascular tumors which are rarely found in the posterior mediastinum.[1] Along with other vascular tumors, these may cause congestive cardiac failure.

Case Report

In June 1995, a 10-month-old male infant (5.4 kg) with failure to thrive, congestive heart failure, and a IV/VI systolic cardiac murmur was found to have a small-to-medium size ventricular septal defect (VSD) by echocardiography. The patient's hemoglobin was 11.5 mg%, and there was no clinical or serological evidence of hemolysis. Because of the discrepancy between the severity of his symptoms (he needed digoxin, captopril, and furosemide to control cardiac failure) and the relatively small size of the VSD, cardiac catheterization was performed. This confirmed the presence of a medium size VSD, but also demonstrated a blush of contrast medium in the apex of the left chest. Magnetic resonance imaging (MRI) subsequently delineated a vascular tumor in the left paravertebral sulcus (Figs. 1a, 1b).

The tumor was removed via a posterolateral left thoracotomy. At operation, the mass appeared to arise from the sympathetic chain in the apex of the left chest. It was moderately vascular but could be completely resected without undue difficulty. The patient made an uneventful recovery and was discharged on the third postoperative day. Six weeks later the cardiac defect was repaired with patch closure in the standard fashion without complications. One year later the patient remains free of any symptoms of heart failure, on no cardiac medications.

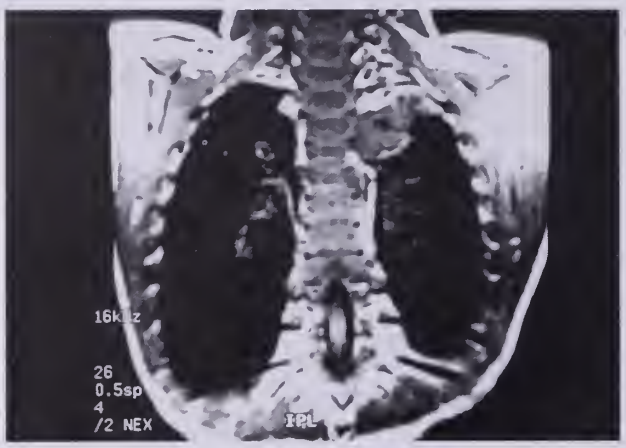
Grossly the tumor was $2.2 \times 2.0 \times 1.3$ cm, pink-red, and well circumscribed. Microscopically the lesion was found to be a benign cellular hemangioma (Figs. 2a, 2b). The tumor appeared to arise from a sympathetic ganglion in the apex of the left chest.

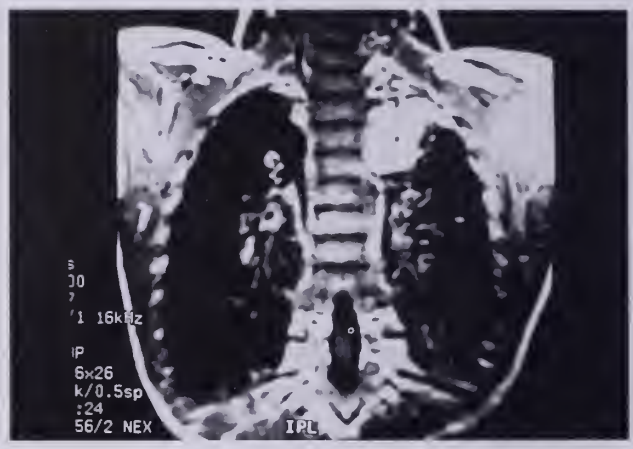
Discussion

In children, unlike adults, primary mediastinal

From the departments of Pathology, Thoracic Surgery, and Radiology, University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma.

Direct correspondence to Christopher J. Knott-Craig MD, University of Oklahoma Health Sciences Center, Department of Thoracic Surgery, P.O. Box 26901, Oklahoma City, OK 73190.





Figures 1o ond 1b. Godolinium T1 coronol mognetic resononce imoges of the thorox show on enhancing moss in the left posterior mediostinum.

tumors are often malignant.[2] In the posterior mediastinum, neurogenic neoplasms are most common, and about half of these are malignant.[3] Hemangiomas of the anterior or posterior mediastinum are very uncommon.[1] By 1978 only 81 cases of benign vascular tumors had been reported in the world literature,[4] and most of these were cavernous or capillary hemangiomas. Currently, well over one hundred cases have been reported, but we could identify only one other instance in which there was isolated involvement of the sympathetic chain by this tumor,[5] similar to our case.

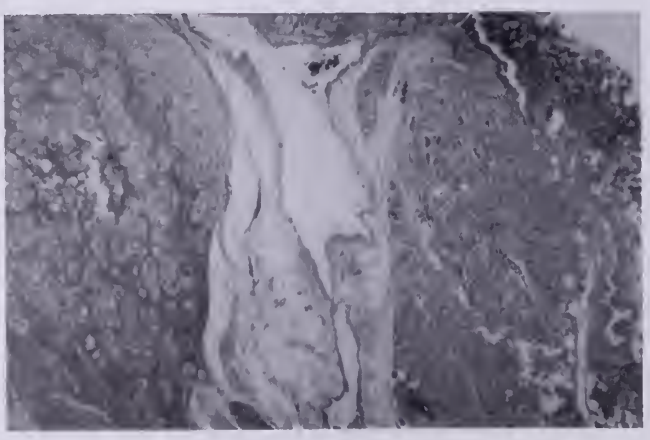
Hemangiomas have a heterogenous gross appearance ranging from well-circumscribed distinct tumors to infiltrating masses and may be difficult to discern clinically unless the tumor is large enough or sufficiently vascular to produce a murmur. Although a chest x-ray may not demonstrate a small tumor, as was the case in our patient, ultimately the standard x-rays may illustrate the characteristic ring-like calcification (phleboliths) seen in longstanding hemangiomas.[4] Computerized tomography (CT) identifies the lesions as solid, and adequately evaluates the extent to which the tumor involves adjacent structures.[6] Arteriograms have failed to demonstrate these lesions in some instances,[6] and magnetic resonance imaging may not be pathognomonic for mediastinal hemangioma.[7]

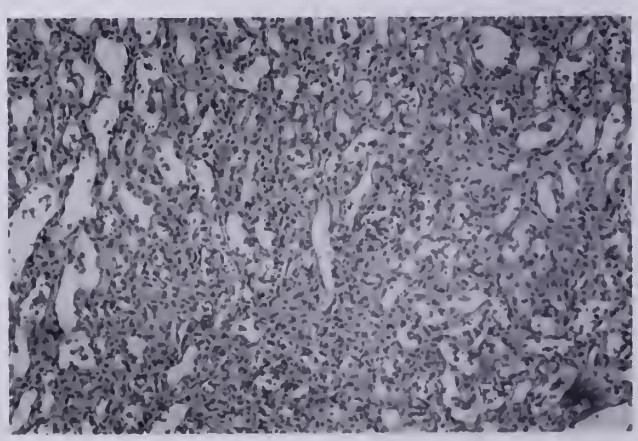
In the present case the tumor was small and was not detected by the standard x-ray views of the chest. The patient's presentation with severe congestive heart failure and a cardiac lesion led to cardiac catheterization which revcaled the tumor and mandated additional radiologic analysis.

Complete resection of mediastinal hemangiomas is the treatment of choice. In some instances, acceptable results have been achieved with subtotal resection, since (1) recurrent lesions usually have not shown evidence of malignant degeneration,[6] and (2) hemangiomas gencrally undergo spontaneous regression over time.[8] More recently, large capillary hemangiomas have becn successfully palliatcd with alpha-interferon.[8]

This paticnt had a very unusual presentation and diagnosis of what proved to bc an uncommon mediastinal tumor. The discrepancy betwecn thc clinical cvaluation of a hcart dcfect and the disproportionate cardiac failure associated with

Figure 2a. Hypercellulor plump oggregotes of endotheliol cells with compressed, diminutive vosculor spoces ore seen adjacent to o sympothetic ganglion.
Figure 2b. Voriobly sized vasculor spoces with slightly increosed cellularity ond oreas of inconspicuous luminol differentiation ore seen.





it led to the heart catheterization which incidentally identified the mediastinal tumor. Resecting the tumor and later closing the VSD resulted in complete resolution of the symptoms of congestive cardiac failure.

An alternative cause for heart failure should always be sought when symptoms seem out of proportion to the severity of the cardiac defect. ɟ

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Alcohol Consumption Among Oklahoma Women: Before and During Pregnancy

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The Pregnancy Risk Assessment Monitoring System (PRAMS) utilizes a population-based survey of Oklahoma women with a recent live birth to examine the rates of alcohol consumption before and during pregnancy. Nearly one-half of Oklahoma women report using alcohol during the three months before pregnancy and one in thirteen women consume alcohol during the three months prior to delivery. Moderate to heavy alcohol use before pregnancy was associated with additional perinatal risk factors including unintended pregnancy, inadequate prenatal care, smoking, and physical abuse. Health providers play an important role in the prevention of alcohol related birth impairments such as fetal alcohol syndrome through early detection of problem drinking, patient education and appropriate referrals. However, one in four Oklahoma mothers report their health care provider did not talk to them about the harmful effects alcohol can have on their baby.

Recent media stories of frail, drug-exposed babies have heightened public awareness concerning the danger of substance abuse for pregnant women and their unborn children. According to the 1996 Institute of Medicine report entitled: *Fetal Alcohol Syndrome: Diagnosis, Epidemiology, Prevention, and Treatment,* "of all the substances of abuse, including heroin, cocaine, and marijuana, *alcohol* produces by far the most serious neurobehavioral effects in the fetus."[1]

Maternal abuse of alcohol during gestation is arguably the most common teratogenic cause of mental retardation in the Western world;[2] the neurobehavioral impairments caused by prenatal alcohol exposure can last a lifetime.[3] Heavy prenatal alcohol consumption has also been associated with fetal loss, stillbirth, structural birth defects, growth deficiency, and learning and behavioral problems, including attention and hyperactivity disorders. Fetal alcohol syndrome (FAS) refers to a specific pattern of physical abnormalities, growth impairments, and cognitive deficiencies observed in children exposed to heavy amounts of alcohol during gestation.[4,5] Unlike many other birth defect syndromes, FAS and other alcohol-related impairments are entirely preventable.

While a precise "safe" level of alcohol consumption during pregnancy has not been identified,[6] it is clear that infants of women who drink heavily are at the greatest risk.[7] However, alcohol use of even two drinks per day or episodic binge drinking (five or more drinks on any one occasion) can have long-lasting effects of diminished IQ and learning problems in young children.[8] Determining who may be at risk for having an affected child based on the amount of alcohol consumed during pregnancy is problematic, as there are marked individual differences in vulnerability to the harmful effects of prenatal alcohol exposure.[6]

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Prevention of FAS and other alcohol-related impairments is one of the national health priorities included in the *Healthy People 2000 Objectives for Health Promotion and Disease Prevention*.[9] An important first step toward prevention is to gain a better understanding of women most at risk and identify those factors associated with drinking before and during pregnaney. The following report deseribes an analysis of the Pregnancy Risk Assessment Monitoring System (PRAMS)[10] data examining the prevalenee of maternal alcohol eonsumption before and during pregnancy, as well as other associated pregnaney risk factors among Oklahoma women.

Methods

PRAMS is a population-based survey of Oklahoma women with a recent live birth. This ongoing projeet was initiated in 1987 through a eooperative agreement between the Centers for Disease Control and Prevention (CDC) and the Oklahoma State Department of Health (OSDH). A stratified systematic sampling approaeh, based on infant birth weight, is used to select approximately 200 resident mothers eaeh month from the Oklahoma registry of live births. Mothers reeeive up to three mailed surveys and telephone interviews are attempted for non-respondents. The average survey is eompleted at six months postpartum. Data for this report refleet live births occurring between April 1988 and Mareh 1994. At the time of this analysis, 9,906 of 14,151 mothers sampled had eompletcd the survey, refleeting an overall response rate of 70%. Of those women who responded to the PRAMS survey, 95% answered questions regarding aleohol use. Analysis weights were applied to adjust for seleetion probability and non-response in order to make statewide estimates. Comparisons among drinkers and nondrinkers were made using Chi square tests. P-values less than .05 were eonsidered statistieally significant. Weighted prevalenee percentages and standard errors are also presented for a variety of demographie and behavioral faetors.

Four questions are used to assess pregnaney-related alcohol use (Fig. 1). Two questions assess the level of aleohol use in the three months prior to pregnancy and during the last three months of pregnaney. The remaining two questions ask whether prenatal care providers questioned and advised mothers about aleohol use during pregnaney. Beeause data used for this report are self-reported, results should be interpreted with caution.

Women who reported they did not drink during the given time periods were elassified as nondrinkers, and women who reported less than one drink per week or more were classified as drinkers. Data from women who reported drinking were stratified by the number of drinks per week: light (<7 drinks/week), moderate (7-13 drinks/week) or heavy (14+ drinks/week). In this report, all data presented as "before" or "prior to" pregnancy will refer specifically to the three-month period of time before pregnancy. Similarly, all data presented as "before delivery" or "during pregnancy" will refer to the three-month period of time before delivery.

Results

Reported Alcohol Use Before and During Pregnancy.—Over the six-year period of time studied, 42.3% of women reported drinking alcohol in the three months prior to pregnancy and 7.8% reported alcohol use in the three months before delivery (Fig. 2). The perecntage of women who drink before pregnaney has remained relatively constant throughout the last six years. There has been a decrease in the rate of drinking during the last three months of pregnancy, from a high of 12.8% during the first year of PRAMS to approximately 6% throughout the last four years. Publie awareness concerning the dangers of drinking during pregnaney, heightened by the implementation of PL 100-690 (November, 1989) requiring warning labels on all aleoholic beverage eontainers, as well as national and state media eampaigns and prevention programs may have

PRAMS Questions Related to Alcohol Use

A. In the 3 *months* before you got pregnant, how many alcoholic drinks did you have in an average week? (A drink is: one glass of wine, one wine cooler, one can or bottle of beer, one shot of liquor, or one mixed drink.)
____ Number of drinks a week
____ Less than I drink a week
____ I didn't drink then
____ I don't know

B. In the *last 3 months* of your pregnancy, how many alcoholic drinks did you have in an average week?
____ Number of drinks a week
____ Less than I drink a week
____ I didn't drink then
____ I don't know

C. When you went for prenatal care, did a doctor, nurse, or other health worker ask you if you were drinking alcoholic beverages? (beer, wine, wine cooler, or liquor)
____ No ____ Yes

D. Did a doctor or nurse talk with you about how drinking during pregnancy could affect your baby?
____ No ____ Yes

Figure 1

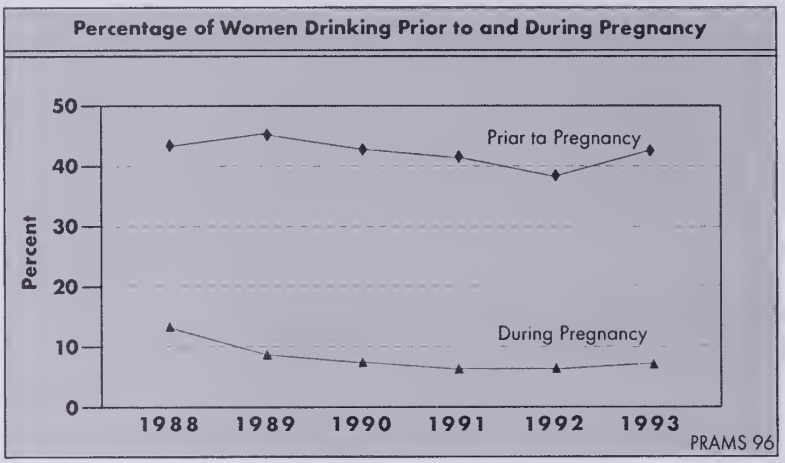


Figure 2.

Table 1. Percentage of Women Drinking Before and During Pregnancy by Demographic Characteristics

Variable	% Before (Std Error)	p-value	% During (Std Error)	p-value
Mother's Race				
White	43.7 (1.1)		6.4 (0.5)	
African Am	29.8 (3.7)	.0002	8.2 (2.2)	.3513
Am Indian	34.7 (3.4)		4.2 (1.4)	
Mother's Age				
<20	34.3 (2.3)		3.8 (0.9)	
20-24	44.8 (1.5)		6.4 (0.8)	
25-29	42.3 (1.5)	.0013	8.1 (0.8)	<.0001
30-34	45.6 (1.9)		11.4 (1.2)	
35 +	41.3 (3.1)		12.6 (2.1)	
Mother's Education				
<12 yrs	34.0 (2.0)		6.8 (1.0)	
12 yrs	40.8 (1.3)	<.0001	6.6 (0.7)	.0218
13-15 yrs	45.8 (1.8)		8.3 (1.0)	
16 + yrs	49.5 (1.9)		10.5 (1.2)	
Parity				
0	46.9 (1.4)		5.7 (0.6)	
1	40.2 (1.5)		8.3 (0.8)	
2	39.2 (2.1)	<.0001	10.2 (1.3)	.0065
3	32.2 (3.6)		10.3 (2.4)	
4+	19.4 (4.2)		8.5 (3.0)	
PNC[1] Location				
Haspital	39.9 (2.4)		7.6 (1.3)	
Health Dept.	40.7 (3.1)	.0007	6.9 (1.4)	.1201
Private MD/HMO	44.3 (1.1)		8.0 (0.6)	
IHS[2]	31.9 (2.9)		4.4 (1.4)	
Income Source				
Jab/Business	44.4 (1.0)	.0010	7.9 (0.5)	9004
Welfare	37.4 (1.9)		7.8 (1.0)	

1 PNC: Prenatal Care
2 IHS Indian Health Service

contributed to the declining rate of reported drinking during pregnancy.

The majority of women who reported alcohol use before or during pregnancy were classified as light drinkers. Overall, 42.3% of Oklahoma women reported drinking at some level in the three months before pregnancy; 39.4% reported less than seven drinks per week (light drinking), 1.9% reported 7 to 13 drinks per week (moderate drinking), and 1.1% reported drinking 14 or more drinks per week (heavy drinking).

The majority of women (92.2%) reported they did not drink any alcohol during the last three months of pregnancy. Nearly 8% (7.7%) reported drinking less than seven drinks per week. Although classified as "light" drinking in this study, no "safe" level of drinking during pregnancy has been established. Less than 1% of PRAMS respondents reported moderate to heavy consumption (seven or more drinks per week) of alcohol during pregnancy.

Characteristics of Women Reporting Alcohol Use Before Pregnancy.—Further analysis of demographic characteristics of women reporting alcohol use before or during pregnancy did not support stereotypes depicting women who drink as uneducated, poor, and often minority women. White women were 1.5 times more likely than African American women to report some level of alcohol use before pregnancy and 1.3 times more likely than American Indian women (Table 1). Women over age 20 were significantly more likely to report drinking before pregnancy than younger women. Higher levels of education were positively associated with reported drinking before pregnancy; women who had completed some college (13+ years) were more likely to report alcohol use before pregnancy than women who had less than a high school education (<12 years). Women with no previous births (primiparous) were significantly more likely to report drinking than women with one or more previous births. Finally, women whose reported source of income was from a job or business were significantly more likely to report alcohol use before pregnancy than those who received income from public assistance.

During Pregnancy.—The percentage of women who reported drinking during the last three months of pregnancy dropped significantly from the rates reported before pregnancy for all population groups (Table 1). However, similar patterns of alcohol use among population groups can be observed. Women age 30 or older were nearly twice as likely to report drinking during pregnancy than younger women (<29 years) and women with 13 or more years of education were 1.4 times more likely to report alcohol use during pregnancy than

women with 12 or fewer years. The trend for parity, however, reversed. Although women with no previous births were more likely to report drinking before pregnancy, they were less likely to report drinking during the last three months of pregnancy than women with at least one previous birth.

Associated Prenatal Risk Factors.—As seen in Table 2, alcohol use prior to and during pregnancy was associated with a number of co-existing prenatal risk factors. Women who planned their pregnancy were less likely to report drinking before pregnancy than women whose pregnancy was not intended. Women who reported smoking before pregnancy were 1.6 times more likely to drink before pregnancy, and those who reported smoking during pregnancy were 2.3 times more likely to drink than non-smokers. Those who reported having "someone very close" with a drinking or drug problem were significantly more likely to report using alcohol before and during pregnancy. Women who reported being physically hurt by their husband/partner during the 12 months before delivery were also significantly more likely to report alcohol use prior to pregnancy, and although they were 1.6 times more likely to also report drinking during pregnancy, the difference was not statistically significant.

Changes in Drinking Behaviors During Pregnancy.—Virtually all (99.7%) PRAMS respondents who reported they did not drink before pregnancy reported they also abstained from alcohol use during the last three months of pregnancy. Furthermore, 82.3% of women who drank before pregnancy stopped drinking and reported no alcohol use during the three months prior to delivery. However, one in six women who drank alcohol prior to pregnancy also reported drinking at some level during the three months prior to delivery, defined for this study as continued drinking.

In order to identify factors which may put a woman at risk for continuing to drink during her pregnancy versus quitting, further analysis of the data describing women who reported drinking prior to pregnancy was completed (Table 3). Women who were older or had previous births were more likely to report continued drinking than younger or primiparous women. Women who lived in urban areas or who smoked during pregnancy were significantly more likely to report drinking both before and during pregnancy. As expected, higher levels of alcohol use before pregnancy were significantly associated with continued drinking. On a positive note, women who reported that their health care provider asked them about alcohol use were significantly more likely to report abstaining from alcohol during the three months prior to delivery. Other factors such as mother's race, education level, source of income, and various other stressors were not significantly associated

Table 2. Percentage of Women Drinking Before and During Pregnancy by Prenatal Risk Factors

Variable	% Before (Std Error)	p-value	% During (Std Error)	p-value
Pregnocy Intentian				
Intented	40.5 (1.1)		7.8 (0.6)	
Not intended	45.4 (1.4)	.0058	8.0 (0.7)	.7776
Tobacca Use				
Non-Smoker	35 8 (1.0)		6.1 (0.5)	
Smoker	57.5 (1.6)	<.0001	13.9 (1.3)	<.0001
Sameane Clase Using Drugs				
No	40.1 (0.9)		7.2 (0.5)	
Yes	52.7 (2.1)	<.0001	9.8 (1.2)	<.0474
Physically Hurt by Husband/Partner				
No	41.8 (0.9)		7.5 (0.5)	
Yes	51.2 (3.8)	.0162	12.0 (2.4)	.0609

Table 3. Risk Factors Associated with Drinking During Pregnancy Amang Pre-Pregnancy Drinkers

	Drink During Pregnocy?		
Variable	Yes % (Std Error)	No %(Std Error)	p-value
Mather's Age			
<20	6.8 (1.7)	14.1 (1.1)	
20-24	25.1 (2.8)	33.1 (1.4)	
25-29	30.0 (2.9)	29.3 (1.3)	<.0001
30-34	27.3 (2.8)	18.0 (1.1)	
35+	11.0 (1.9)	5.5 (0.6)	
Parity			
0	31.2 (3.0)	51.3 (1.5)	
1	35.7 (3.1)	30.9 (1.4)	
2	22.5 (2.8)	13.4 (1.0)	<.0001
3	7.5 (1.9)	0.6 (0.6)	
4+	3.1 (1.1)	0.8 (0.3)	
Residence			
Urbon	69.4 (2.9)	61.9 (1.4)	.0214
Rural	30.6 (2.9)	38.1 (1.4)	
Smake During Pregnancy			
No	61.9 (3.1)	74.4 (1.3)	.0003
Yes	38.1 (3.1)	25.6 (1.3)	
Drinking Level Before Pregnoncy			
<7	88.8 (1.9)	94.2 (0.7)	
7-13	5.6 (1.3)	4.1 (0.6)	.0196
14+	5.6 (1.5)	1.6 (0.4)	
Did HCP* Ask About Drinking			
No	17.7 (2.4)	11.7 (0.9)	.0227
Yes	82.3 (2.4)	88.3 (0.9)	

*Health Care Provider

with continued drinking during pregnancy (data not shown).

Moderate/Heavy Drinking Before and During Pregnancy.— Although no "safe" threshold for alcohol use during pregnancy has been established, studies have indicated that neurobehavioral and physical impairments are more likely to result from frequent (2+ drinks per day) or binge (5+ drinks on any occasion) drinking during pregnancy.[6] Learning more about personal and social risk factors of women who continue heavy drinking during pregnancy might allow prevention efforts to be targeted more specifically to maternal risk drinkers.[1] Unfortunately, the number of PRAMS respondents who report moderate to heavy alcohol use *during* pregnancy is too small to complete this type of analysis. However, measures of alcohol consumption before pregnancy may reflect actual use before pregnancy recognition, which includes the time of conception and early gestation.[11] The developing fetus's "window of vulnerability" to the teratogenic effects of alcohol begins very early in gestation, often before many women recognize they are pregnant.[12-14] Questions about alcohol use before pregnancy may trigger less denial, and responses may more closely reflect actual use.[15] Mothers who reported drinking seven or more drinks per week *prior* to pregnancy were significantly more likely than non-drinkers to have one or more serious prenatal risk factors, including higher rates of unintended pregnancy and late or no prenatal care (Fig. 3). Nearly three-fourths (71%) of moderate to heavy drinkers smoked prior to pregnancy (data not shown), and over half (51%) reported smoking during the last trimester of pregnancy. Women who drank seven or more drinks per week before pregnancy were 2.7 times more likely than non-drinkers to have someone close with a substance abuse problem, and nearly three times (2.8) more likely to report being physically hurt by their husband or partner during 12 months before delivery.

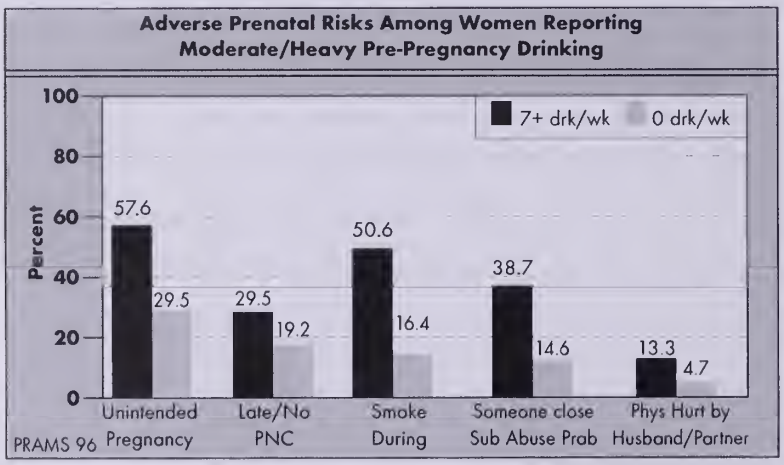


Figure 3.



Figure 4.

Counseling About Alcohol Use.— As noted in Figure 4, 89% of women who entered prenatal care reported being asked by a health care professional about alcohol use, with a moderately increasing trend over the last six years from 84% to 92%. The percentage of women who were counseled by their prenatal care provider about the effects of alcohol on the fetus has remained stable at approximately 72%. Despite an improving trend, as of 1994 one in ten women report they were not asked by a health professional about alcohol use, and one in four women report they were not counseled about the harmful effects alcohol could have on their developing baby.

Analysis of the variables significantly associated with being asked or counseled about alcohol use indicated that the specific population groups who were *more* likely to report drinking both prior to and during pregnancy were *less* likely to be asked or counseled about their use. For example, although white women, older women, and women with more than a high school education were more likely to report drinking before and during pregnancy, these groups were significantly *less* likely to be asked or counseled about alcohol use than African American or American Indian women, younger women, or less educated women (Table 4). Women receiving care from private doctors were less likely to be asked or counseled than women receiving care from hospitals, health departments, or the Indian Health Service (IHS). Women with an income from a job or business were less likely to be counseled about alcohol use than women receiving public

assistance. These data suggest that a perception may exist among health professionals which places a higher suspicion of risk for alcohol use during pregnancy on certain population groups of women.

Discussion

This analysis is subject to a number of limitations, the most significant of which is the limitation of self-reported data. Data on alcohol use included in this report are considered to be conservative estimates of actual use. Under-reporting of alcohol use (especially heavy alcohol use) during pregnancy (in surveys as well as in clinical settings) has been well documented.[16] While public health warnings about the use of alcohol during pregnancy may reduce alcohol use among some women, warnings can also increase guilt and subsequent denial of actual use among other women.[15] Self-reported data potentially limits the accuracy of reports concerning both the use of alcohol (yes/no) and the actual amount of alcohol consumed. The alcohol content of a reported "drink" is subjective and depends on the strength of the beverage and the volume of the glass or container used.[17] Finally, while PRAMS does ask about the average amount of alcohol consumed in a week, it does not allow for identification of "binge" drinking (drinking five or more drinks on any one occasion), which may be particularly harmful to the developing fetus.[8] Recall of drinking patterns before and during pregnancy may pose a further limitation as surveys are completed about six months following childbirth.

Despite these limitations, these data are useful in assessing the problem of maternal alcohol consumption and related pregnancy risk factors among Oklahoma women. Although PRAMS data indicate the rate of alcohol use during pregnancy has declined over the last six years, still one in 13 women report alcohol use during the last three months before delivery. Nearly one-half of women report alcohol use during the three months prior to pregnancy, generating a potential risk to early, undetected pregnancies.

The prevalence of alcohol use prior to and during pregnancy underscores the need to sustain efforts by public health agencies and health care providers to advise women against drinking if they are trying or likely to become pregnant.[18] Although traditional public education campaigns and warning labels often fail to change behavior in heavy drinkers, their importance in raising awareness about the risks of alcohol use during pregnancy cannot be ignored.[7,19] The universal message that women should abstain from drinking alcohol throughout pregnancy should be emphasized.

Health care providers play an important role in the prevention of FAS and other alcohol-related birth defects through early detection of problem drinking, patient education, and appropriate referrals. Because nearly 20% of women do not receive prenatal care within the first trimester,[20] targeting health care provider interventions only to pregnant women will miss a substantial percentage of women at risk.[14] Prevention of maternal use of alcohol during pregnancy can begin with health care providers when they routinely evaluate alcohol use by *all* their patients of childbearing age.[21] Alcohol use screening tools that assess current or past levels of use, such as the

Table 4. Variables Associated with PNC Providers Asking and Counseling About Alcohol Use

Variable	Asked % (Std Error)	p-value	Counseled % (Std Error)	p-value
Mother's Race				
White	87.4 (0.6)		69.6 (0.8)	
African Am	93.1 (1.6)	<.0001	82.8 (2.4)	<.0001
Am Indian	95.6 (1.1)		83.4 (2.1)	
Mother's Age				
<20	94.1 (1.1)		84.2 (1.7)	
20-24	92.8 (0.8)		78.1 (1.2)	
25-29	85.7 (1.1)	<.0001	68.8 (1.4)	<.0001
30-34	83.1 (1.4)		60.5 (1.9)	
35 +	82.8 (2.4)		58.8 (3.1)	
Education				
<12 yrs	92.2 (1.1)		81.5 (1.6)	
12 yrs	89.3 (0.8)	.0001	74.0 (1.1)	.0000
13-15 yrs	87.9 (1.2)		67.2 (1.7)	
16 + yrs	84.0 (1.4)		61.9 (1.8)	
Parity				
0	91.8 (0.7)		80.3 (1.0)	
1	85.7 (1.0)		66.3 (1.4)	
2	89.0 (1.3)	<.0001	68.5 (1.9)	<.0001
3	86.8 (2.4)		61.5 (3.7)	
4+	84.6 (3.8)		62.0 (5.2)	
PNC[1] Location				
Hospital	92.0 (1.3)		73.9 (2.0)	
Health Dept.	96.4 (1.0)		87.4 (1.9)	
Private MD/HMO	86.1 (0.7)	<.0001	67.2 (1.0)	<.0001
IHS[2]	94.7 (1.4)		82.9 (2.3)	
PNC Entry				
1st	87.9 (0.6)	.0010	70.4 (0.8)	<.0001
2nd/3rd/No Care	92.1 (1.1)		78.6 (1.7)	
Income Source				
Job/Business	87.1 (0.6)	<.0001	69.0 (0.9)	<.0001
Welfare	93.5 (0.9)		79.7 (1.7)	
Smoke Before Pregnancy				
No	88.7 (0.6)	.9375	69.0 (0.9)	<.0001
Yes	88.8 (0.9)		78.6 (1.3)	

Ten Question Drinking History,[22] or tools to assess the consequences of problem drinking like the T-ACE[23] or TWEAK[11] (Fig. 5) may be helpful in identifying pregnant and non-pregnant women who are using or abusing alcohol.

Intervention for low risk women generally involves providing factual information about the risks associated with heavy alcohol use, including the harmful effects of alcohol on the fetus. Once they become aware that they are pregnant, women who drink should be advised to stop drinking as soon as possible to improve the chances of having a healthier baby.[7,24] Women of childbearing age who abuse alcohol should be counseled about the risks of alcohol use during pregnancy and be offered referral and access to family planning services to delay pregnancy until a time when abstinence throughout a nine-month pregnancy is possible. When problem drinking is identified, or when brief interventions fail to reduce alcohol use, clinicians should be prepared to make appropriate referrals for alcohol treatment services. Unfortunately, many health care providers feel unprepared to deal with issues related to alcohol use during pregnancy and may be unaware of alcohol treatment resources available in their community. In 1992, a profile of pregnant or parenting women with alcohol or other drug addiction was completed in four southern sites including Oklahoma City.[25] Results indicated that although 65% of women interviewed had been asked about alcohol or other drug use by a doctor or nurse during their most recent pregnancy, very few (5%) of these addicted women were referred for substance abuse treatment.

Although PRAMS data suggest a declining rate of drinking during pregnancy over the past six years, there is no evidence of changes in drinking behavior among women at the time of conception or the rate of moderate to heavy drinking before or during pregnancy. Continued research is needed to understand the personal and socio-environmental risk factors that contribute to maternal drinking in order to develop more ef-

Alcohol Use Screening Tools

Ten Question Drinking History[23]

Beer: How many times per week?
How many cans each time?
Ever drink more?

Wine: How many times per week?
How many glasses each time?
Ever drink more?

Liquor: How many times per week?
How many drinks each time?
Ever drink more?

Has your drinking changed during the past year?

The Ten Question Drinking History provides a structured, non-judgemental approach for systematic interviewing about alcohol use. Helpful to assess changes in drinking levels and patterns across time. There is no clearly delineated cutoff point to determine risk drinking. Interviewer may want to specify time frame for questions.

T-ACE[24]

T How many drinks does it take to make you feel high? **(tolerance)**

A Have people **annoyed** you by criticizing your drinking?

C Have you ever tried to **cut down** on your drinking?

E Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover? **(eye-opener)**

The tolerance question scores 2 points if women need more than two drinks to get high; and the annoyed, cut down and eye-opener questions each score 1 point. Scores of 2 or more are considered positive.

TWEAK[12]

T **Tolerance:** How many drinks can you hold?

W Have close friends or relatives **worried** or complained about your drinking in the past year?

E **Eye-opener:** Do you sometimes take a drink in the morning when you first woke up?

A **Amnesia:** Has a friend or family member ever told you about the things you said or did while you were drinking that you could not remember?

K (C) Do you sometimes feel the need to **cut down** on your drinking?

A 7-point scale is used to score the test. The tolerance question scores 2 points if a woman reports she can hold more than five drinks without falling asleep or passing out. A positive response to the last three questions scores 1 point each. A total score of 2 or more points indicates that a woman is likely to be a risk drinker

Figure 5.

fective prevention strategies, thereby improving the health of women and their children.

State Resources.— The Oklahoma State Department of Health Fetal Alcohol Syndrome Prevention Program provides professional and community education on the prevention of FAS and is evaluating the effectiveness of FAS prevention methods for high risk women. Alcohol and other drug treatment services for women are available in many Oklahoma communities. Several of the state's residential treatment programs make it possible for women to keep their children with them or, if pregnant, to get medical care before and after their babies are born. The Department of Mental Health and Substance Abuse Services has set up a "Reach-Out" hotline to assist clients and professionals in accessing treatment services for women (Fig. 6).

FAS Prevention Center	**Reach-Out Hotline**
Oklahoma State Department of Health	Oklahoma State Department of Mental
1000 N.E. Tenth Street	Health and Substance Abuse Services
Oklahoma City, OK 73117-1299	P.O. Box 53277
(405) 271-6617	Oklahoma City, OK 73152
FAX (405) 271-4892	(800) 522-9054

Figure 6.

Acknowledgment

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Managed Health Care: A Concept Not Understood by Rural Oklahomans

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Objective: The purpose of the study was to find out what people in rural Oklahoma know and understand about managed care. **Methods:** A fourteen-statement survey instrument was developed. A panel of managed care professionals were asked to participate to provide a "standard" to compare the responses of the general public. The survey was administered to the general public in five rural communities and to recipients of the Oklahoma AHEC Newsletter. **Results:** Overall, the panel tended to agree and created an industry profile useful in comparison to the responses of the general public: (1) 55-65% of the respondents answered *I Don't Know* or *Neither Agree nor Disagree* to statements using the term "managed care" and only 15-20% of the public respondents answered *I Don't Know* to statements *not* including the term, "managed care." (2) 25-30% of the general public answered in accordance with the managed care panel. (3) Over 50% of the public respondents *Agreed* that changes are necessary in the health sector. **Conclusions:** The results of this survey suggest that rural Oklahomans are uninformed about the concept of managed care and need to become better informed.

Objectives

Changes are occurring rapidly in the delivery of health care services. The changes are often market driven. Large urban physician groups are purchasing smaller rural physician practices. Hospitals are purchasing other hospitals or forming networks. The State of Oklahoma is moving Medicaid to a managed care delivery system; changes have already been implemented in the urban areas of the state and transition is scheduled for the rural areas before the end of the year. Discussions at the Federal level have managed care concepts incorporated into the legislation being proposed for Medicare.

For managed care to realize its potential for saving money, and at the same time ensure a healthy public, an informed consumer is necessary. Yet, in Oklahoma there appears to be a great deal of confusion on the issues surrounding managed care. The objective of this study was to find out what people in rural Oklahoma know and understand about managed care so that those responsible for implementing the change to a managed care system might recognize areas where clarification is necessary as well as areas where support for managed care might be reinforced.

Methods

A fourteen-statement survey instrument was developed. A copy of the survey is found in Figure 1. For each statement on the survey, the respondents were offered the following responses: *Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, or Strongly Agree.* The respondents were also able to answer the statement with *I Don't Know.*

To establish a basis for comparison, a panel of managed care professionals were asked to

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complete the survey. The panel members are persons who currently work for managed care companies in Oklahoma or agencies responsible for moving Medicaid to a managed care system, and who also receive their own health care in managed care plans. Eight responses were received from this panel of managed care professionals. These answers will assist in determining the level of understanding of managed care in Oklahoma by providing a "standard" against which to compare the responses of the general public. The panel may or may not represent the "truth" about managed care, but a comparison of the responses will indicate how close the industry is to, or divergent from, their potential customers.

The survey was conducted by AmeriCorps Members with OkPATCH, a community health planning project of Rural Health Projects/NwA-HEC. It was administered in five rural communities: Alva, Atoka, Lawton, Muskogee, and Tahl-

Managed Care Knowledge and Attitude Survey

Site _____
Interviewer initials _____
Date _____
Time _____

	I Don't Know	Stongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
1. "Managed care lawers the cast af health care."	0	1	2	3	4	5
2. "Managed health care systems will provide fewer health care services."	0	1	2	3	4	5
3. "Managed care moves the facus af health care toward the preventian of illness and injury."	0	1	2	3	4	5
4. "Patient's feelings are of great concern to providers in a managed care system."	0	1	2	3	4	5
5. "In managed health care systems I can choose my awn physician without restriction."	0	1	2	3	4	5
6. "In managed health care systems the quality af medical care is less than that of nan-managed health care systems."	0	1	2	3	4	5
7. "In managed health care systems I can expect shorter waiting times."	0	1	2	3	4	5
8. "Managed care changes the way service delivery is paid for."	0	1	2	3	4	5
9. "I would be willing to accept limits on choice af physicians in order to save money."	0	1	2	3	4	5
10. "Managed care will decrease the tatal costs of health care."	0	1	2	3	4	5
11. "There is more 'hassle' with managed health care than with non-managed health care."	0	1	2	3	4	5
12. "In managed health care systems I am less likely to see a physician."	0	1	2	3	4	5
13. "The traditianal way health care is delivered and paid far is fine naw. No changes are necessary."	0	1	2	3	4	5
14. "Overall, I approve of the trend toward managed health care."	0	1	2	3	4	5

Gender _____
Age _____
Zip Code _____
Occupation _____

Where do you currently receive mast of your primary health care? (check one)
_____ private physicians affice/clinic
_____ Indian Health Service clinic
_____ Haspital emergency room/emergency care clinic
_____ Health Maintenance Organization/managed care system
_____ Other _____

Figure 1.

equah. In Lawton, Muskogee and Tahlequah managed care products have recently been introduced. Atoka and Alva are communities with no managed care penetration. Over 100 surveys were completed at each site. The survey was also distributed statewide to all recipients of the Oklahoma AHEC Newsletter and these responses are listed under an "Other" category. For the "Other" category, exact location of the respondents is unknown. In total, 768 people responded to the survey.

Survey respondents consisted of all occupations and ages. Occupations were grouped as follows: Blue Collar Workers, White Collar Workers, Professionals, Retirees, Housewives or Homemakers, Students, Disabled Persons, Health Care Workers, and Other. The respondents were also analyzed in the following age groups: <22 years or age, 22-34 years, 35-64 years, 65-75 years, and 76+ years. The survey results were also analyzed for males and females.

Results

The results of the survey are presented in Tables 1-3. The responses of the managed care panel are presented in Table 1. Responses for each question with aggregate results from all five sites and the "Other" category are presented in Table 2. Data in Table 3 show the results of all five sites and the "Other" category for each question with the *"I Don't Know"* responses removed, which allows the responses from those persons who *Do* have

Table 1. Managed Care Knowledge and Attitude Survey Panel Results

	I Don't Know	Stongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	
	0	1	2	3	4	5	Totals
1. "Managed care lowers the cast of health care."	0	0	0	0	1 (12.5%)	7 (87.5%)	8
2. "Managed health care systems will provide fewer health care services."	0	4 (50.0%)	2 (25.0%)	1 (12.5%)	1 (12.5%)	0	8
3. "Managed care maves the focus of health care toward the prevention af illness and injury."	0	0	0	1 (12.5%)	0	7 (87.5%)	8
4. "Patient's feelings are of great concern ta praviders in a managed care system."	0	0	0	0	5 (62.5%)	3 (37.5%)	8
5. "In managed health care systems I can choase my own physician without restriction."	0	3 (37.5%)	2 (25.0%)	1 (12.5%)	1 (12.5%)	1 (12.5%)	8
6. "In managed health care systems the quality of medical care is less than that of non-managed health care systems."	0	8 (100%)	0	0	0	0	8
7. "In managed health care systems I can expect shorter waiting times."	0	0	4 (50%)	3 (37.5%)	1 (12.5%)	0	8
8. "Managed care changes the way service delivery is paid for."	0	0	0	0	1 (12.5%)	7 (87.5%)	8
9. "I would be willing to accept limits on choice of physicians in arder to save money."	0	0	0	0	5 (62.5%)	3 (37.5%)	8
10. "Managed care will decrease the total costs of health care."	0	0	0	0	2 (25.0%)	6 (75.0%)	8
11. "There is more 'hassle' with managed health care than with non-managed health care."	0	3 (37.5%)	3 (37.5%)	2 (25.0%)	0	0	8
12 "In managed health care systems I am less likely to see a physician."	0	3 (37.5%)	4 (50.0%)	0	0	1 (12.5%)	8
13. "The traditional way health care is delivered and paid for is fine now. No changes are necessary."	0	8 (100%)	0	0	0	0	8
14. "Overall, I approve of the trend toward managed health care."	0	0	0	0	1 (12.5%)	7 (87.5)	8

some level of understanding of each question to be analyzed separately.

The speeifie responses to eaeh question for the panel and for the general publie by sites, by oeeupational groups, by age and gender groups are available upon request. Responses to eaeh of the fourteen questions are available in fourteen separate tables. Details inelude the number of responses and the pereentage of respondents for the managed eare panel, the five sites and the "Other" eategory, the occupational groups, the age groups, and gender.

Managed Care Panel Responses.— The responses of the eight managed eare professionals are presented in Table 1. These responses are used to refleet what the industry believes is true about managed eare. The eight responses represent seven different managed eare organizations or ageneies. The respondents are eonsumers of managed eare as well as professionals working with the system.

A eomparison between this panel and the publie shows how far the industry is from the publie understanding of managed eare. This study ean provide information to the industry about how they need to package a produet aeeeptable to their potential eustomers, or where they need to eoneentrate their edueational efforts so that the publie would be reeeptive to purehasing their health eare through a managed eare system.

The panel was unanimous in their response to Statement 1 with 100% *Agreeing or Strongly Agreeing* that "managed eare lowers the eost of health eare." Seventy-five pereent of the panel *Strongly Disagreed* or *Disagreed* with Statement 2 that, "Managed health eare systems will provide fewer health eare serviees." Statement 3, "Managed eare moves the foeus of health eare toward the prevention of illness and injury," produeed over 87% *Strong Agreement* from the panel. To Statement 4, the panel responded 100% with *Agree or Strongly Agree* that "patient's feelings are of great eoneern to providers in a managed eare system."

The least agreement was found on Statement 5, that "In managed eare systems I ean ehoose my own physieian without restrietion: 62% of the panel *Strongly Disagreed or Disagreed*, while 25% *Agreed or Strongly Agreed* and 13% eould *Neither Agree or Disagree.*

The panel was unanimous in their responses with 100% *Strong Disagreement* to Statement 6, that, "In managed health eare systems the quality of medical eare is less than that of non-managed health eare systems." A laek of eonsensus was exhibited on Statement 7, "In managed health eare systems I ean expeet shorter waiting times," where 50% *Disagreed* while 37% could *Neither Agree or Disagree.*

Statement 8 reeeived 100% Agreement or Strong Agreement that, "Managed eare ehanges the way serviee delivery is paid for." Again, the panel were in 100% *Agreement or Strong Agreement* to Statement 9, "I would be willing to aeeept limits on ehoiee of physieian in order to save money." Another unanimous response was reeeived for Statement 10, on whieh the panel *Agreed or Strongly Agreed* that "Managed eare will deerease the total eosts of health eare." Statement 11, "there is more 'hassle' assoeiated with managed health eare than with non-managed health eare, reeeived 75% *Strong Disagreement or Disagreement* from the panel. Over 87% of the panel responded with *Strongly Disagree* with Statement 12, "In managed health eare systems I am less likely to see a physieian."

Statement 13 reeeived 100% *Strong Disagreement* from the panel that, "The traditional way health eare is delivered and paid for is fine now. No ehanges are neeessary." The panel was 100% in *Agreement or Strong Agreement* with Statement 14 that, "Overall, I approve of the trend toward managed health eare."

An *"I Don't Know"* response was never given by any of the managed eare professionals to any question. Overall, the panel agreed with one another and ereated an industry profile useful in comparison to the responses of the general publie in rural Oklahoma.

Public Responses.— The responses of the 768 survey partieipants are presented in Table 2. What the publie respondents believe ean be eompared with the managed eare panel's responses. While eomparisons ean be made from eaeh survey statement, only seleeted statements are highlighted for diseussion.

On Statement 1, "Managed eare lowers the eost of health eare.: only 29.5% of the publie *Agreed or Strongly Agreed* with the statement. This eompares to 100% of the managed eare professional's responses. The point that really stands out is that 60% of the publie responded with *I Don't Know or Neither Agree nor Disagree.*

Statement 6 was, "In managed health eare systems the quality of medieal eare is less than that of non-managed health eare systems.: While 100% of the managed eare panel *Strongly Disagreed or Disagreed* with this statement, only 17.4% of the publie disagreed. Again, a large number of the publie responded *I Don't Know or Neither Agree nor Disagree* (66.6%).

Statement 13, "The traditional way health eare is delivered and paid for is fine now. No ehanges

are necessary, received the lowest percent of *I Don't Know* responses (15.4%) of any statement in the survey. Over 54% of the public responses *Disagreed or Strongly Disagreed* with the statement, as compared to 100% of the managed care panel Disagreeing with the statement. This suggests that over half of the general public agree that changes need to occur.

The final statement (Statement 14) asked the respondents about their overall approval of the trend towards managed care. Only 24.9% of the public *Agreed or Strongly Agreed* with the statement. The managed care panel *Agreed or Strongly Agreed* on 100% of their responses. This statement also had a high percent of *I Don't Know* responses or *Neither Agree nor Disagree* responses (60.7%) form the public.

The results of the public's responses could be discussed for each statement; however, many of the results are similar. Some general highlight statements summarize the findings:

- 55-65% of the respondents responded with either *I Don't Know* or *Neither Agree nor Disagree* to statements with the term "managed care" in the statement.
- Only 15 to 20% of the public respondents answered *I Don't Know* to statements that did not include the term, "managed care."
- Only 25 to 30% of the general public answered in accordance with the managed care panel.

Table 2. Managed Care Knowledge and Attitude Survey Aggregate Results

	I Don't Know	Stongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	
	0	1	2	3	4	5	Totals
1. "Managed care lawers the cast af health care."	402 (53.2%)	21 (2.8%)	56 (7.4%)	54 (7.1%)	208 (27.5%)	15 (2.0%)	756
2. "Managed health care systems will pravide fewer health care services."	327 (43.5%)	34 (4.5%)	124 (16.5%)	101 (13.5%)	144 (19.2%)	21 (2.8%)	751
3. "Managed care maves the facus af health care taward the prevention af illness and injury."	328 (43.6%)	26 (3.5%)	79 (10.5%)	93 (12.3%)	203 (27.0%)	24 (3.2%)	753
4. "Patient's feelings are af great concern ta praviders in a managed care system."	309 (41.1%)	33 (4.4%)	102 (13.5%)	117 (15.6%)	135 (18.0%)	56 (7.4%)	752
5. "In managed health care systems I can chaase my awn physician withaut restrictian."	344 (46.4%)	49 (6.6%)	153 (20.6%)	85 (11.5%)	93 (12.6%)	17 (2.3%)	741
6. "In managed health care systems the quality af medical care is less than that af nan-managed health care systems."	378 (50.5%)	23 (3.1%)	107 (14.3%)	120 (16.1%)	99 (13.2)	21 (2.8%)	748
7. "In managed health care systems I can expect sharter waiting times."	372 (50.0%)	39 (5.2%)	126 (16.9%)	104 (14.0%)	95 (12 8%)	9 (1 2%)	745
8. "Managed care changes the way service delivery is paid far."	360 (48.6%)	11 (1.5%)	54 (7.3%)	96 (13.0%)	208 (28.0%)	12 (1.6%)	741
9. "I would be willing ta accept limits an chaice af physicians in arder ta save maney."	148 (19.9%)	78 (10.5%)	234 (31.4%)	80 (10.8%)	179 (24 0%)	25 (3.4%)	744
10. "Managed care will decrease the tatal casts af health care."	366 (49.6%)	29 (3.9%)	81 (11.0%)	88 (11 9%)	157 (21.3%)	17 (2.3)	738
11. "There is mare 'hassle' with managed health care than with nan-managed health care."	381 (51.3%)	10 (1.3%)	100 (13.5%)	106 (14.3%)	109 (14 7%)	36 (4.9%)	742
12. "In managed health care systems I am less likely ta see a physician."	309 (41.5%)	34 (4.6%)	159 (21.4%)	108 (14 5%)	119 (16 0%)	15 (2 0%)	744
13 "The traditianal way health care is delivered and paid far is fine naw. Na changes are necessary."	116 (15.4%)	98 (13.0%)	314 (41.8%)	89 (11 9%)	111 (14.8%)	23 (3 1%)	751
14 "Overall, I approve af the trend taward managed health care."	341 (45.2%)	35 (4.6%)	81 (10.7%)	117 (15.5%)	157 (20.8%)	23 (3.1%)	754

• Over 50% of the public respondents *Agreed* that changes are neeessary in the health sector.

Results by Occupation, Site, Age, and Gender. Detailed data are available for each statement by occupation, site, age, and gender upon request. The general conelusions from the detailed analysis are:

• There are no significant differenees in responses by sites. The aggregate results in Table 2 are representative of the responses from the individual sites.

• In general, Health Care Workers had the lowest percent of *I Don't Know* responses, with White Collar Workers and Professionals following with the next lowest percent of *I Don't Know* responses.

• The groups with the least defined opinion (most I Don't Know) were Blue Collar Workers, Retirees, Housewives, Students, and Disabled.

• By age groups, the <22 year age group and the 65 and over age groups had the highest percent of *I Don't Know* responses, ranging form 40 to 80%.

• There were no significant differenees between male and female responses to this survey.

Public Responses Without the *I Don't Know* Responses.— Since there were so many *I Don't Know* responses, an analysis to compare the responses from the public with "knowledge" of managed care to the responses of the managed care professional panel seemed warranted. Again,

Table 3. Managed Care Knowledge and Attitude Survey Aggregate Results Without the "I Don't Know"

	Stongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	
	1	2	3	4	5	Totals
1. "Managed care lowers the cost of health care."	21 (5.9%)	56 (15.8%)	54 (15.3%)	208 (58.8%)	15 (4.2%)	354
2. "Managed health care systems will pravide fewer health care servicess"	34 (8.0%)	124 (29 2%)	101 (23.8%)	144 (34.0%)	21 (5.0%)	424
3. "Managed care maves the facus af health care taward the preventian af illness and injury."	26 (6.1%)	79 (18.6%)	93 (21.9%)	203 (47.8%)	24 (5.6%)	425
4. "Patient's feelings are af great cancern ta praviders in a managed care system."	33 (7.4%)	102 (23.0%)	117 (26.4%)	135 (30.5%)	56 (12.6%)	443
5. "In managed health care systems I can chaase my awn physician withaut restrictian."	49 (12.3%)	153 (38.5%)	85 (21.4%)	93 (23.4%)	17 (4.3%)	397
6. "In managed health care systems the quality af medical care is less than that af nan-managed health care systems."	23 (6.2%)	107 (28.9%)	120 (32.4%)	99 (26.8%)	21 (5.7%)	370
7. "In managed health care systems I can expect sharter waiting times."	39 (10.5%)	126 (33.8%)	104 (27.9%)	95 (25.5%)	9 (2.4%)	373
8. "Managed care changes the way service delivery is paid far."	11 (2.9%)	54 (14.2%)	96 (25.2%)	208 (54.6%)	12 (3.1%)	381
9. "I wauld be willing ta accept limits an chaice af physicians in arder ta save maney."	78 (13.1%)	234 (39.3%)	80 (13.4%)	179 (30.0%)	25 (4.2%)	596
10. "Managed care will decrease the tatal casts af health care."	29 (7.8%)	81 (21.8%)	88 (23.7%)	157 (42.2%)	17 (4.6%)	372
11. "There is mare 'hassle' with managed health care than with nan-managed health care."	10 (2.8%)	100 (27.7%)	106 (29.4%)	109 (30.2%)	36 (10.0%)	361
12. "In managed health care systems I am less likely ta see a physician."	34 (7.8%)	159 (36.6%)	108 (24.8%)	119 (27.4%)	15 (3.4%)	435
13. "The traditianal way health care is delivered and paid far is fine naw. Na changes are necessary."	98 (15.4%)	314 (49.4%)	89 (14.0%)	111 (17.5%)	23 (3.6%)	635
14. "Overall, I apprave af the trend taward managed health care."	35 (8.5%)	81 (19.6%)	117 (28.3%)	157 (38.0%)	23 (5.6%)	413

since most of the responses are similar by statement, only selected statements were chosen for discussion (Table 3).

Relative to Statement 1, "Managed care lowers the cost of health care," 63% of the "informed" public responded with *Agree or Strongly Agree* compared to only 29% when the *I Don't Know* responses are included. This indicates closer agreement to the panel who were in 100% agreement that managed care lowers the cost of health care.

In response to Statement 4, "Patient's feelings are of great concern to providers in a managed care system, the public *Agreed or Strongly Agreed* with the statement 43.1% of the time with the *I Don't Know* (IDK) responses removed, whereas the agreement is only 25% with IDKs included. The group who is willing to express an opinion is closer to the responses of the managed care panel who answered 100% in agreement to the statement.

Rural Oklahomans resist giving up choice of physician in managed care plans even if money will be saved.

Relative to Statement 13 which stated that changes were not needed in the health sector, 64.8% of the public *Disagreed* with the statement when IDKs were taken out. Fifty-five percent *Disagreed* with IDKs included while 100% of the panel *Disagreed* with the statement.

On Statement 14 which deals with approval of the trend towards managed care, 43.6% of the public *Agreed* or *Strongly Agreed* without the IDKs compared to only 24% with IDKs. Again the public is closer, although still substantially at odds with the panel who *Agreed or Strongly Agreed* 100% with this statement.

Some general statement can be made about the panel and public stance with the *I Don't Know* responses removed:

- Responses of the public with some knowledge of managed care *agreed* with the panel 40 to 60% of the time.
- From 15 to 30% of the general public still responded with *Neither Agree nor Disagree.*
- 64.8% of the general public *agrees* that changes need to occur in the health care system while 100% of the panel *Agreed* to this statement.

Conclusions

The survey results are staggering with respect to an apparent lack of knowledge relative to managed care. Key highlights of the study are:

- In general over 50% of the respondents answered *I Don't Know* to statements about managed care.
- In general over 60% of the respondents answered *I Don't Know or Neither Agree nor Disagree* to managed care statements.
- In general over 75% of the respondents answered *I Don't Know or Neither Agree nor Disagree*, or were against what managed care is trying to accomplish.
- Only 15% of the respondents answered *I Don't Know* to the two statements which did not use the words *managed care.* These results seem to strongly suggest that the term *managed care* confuses and/or turns off the majority of rural Oklahomans. The concept of managed care needs to be more fully explained, made more "user friendly," or replaced by another term.

If the data are further analyzed as to sites, occupations, age groups, and gender, the results indicate the following:

- There were no significant differences in responses by site locations. Lack of information is widespread, even in areas where new managed care plans are being offered.
- Rural Oklahomans agree that something needs to be done with the current health care system. They accept the need for change. How can managed care plans capitalize on this acceptance? (The exception to this opinion is the over 65 age group where a significant proportion feel that the health care system is fine the way it is. What effect might the opinion of this segment of the population have on the effort to change Medicare to managed care?)
- Rural Oklahomans resist giving up choice of physician in managed care plans even if money will be saved. The panel and the public could not be in more complete disagreement on an issue. Can the industry change public opinion on this topic?
- Many rural Oklahomans believe there is increased "hassle" involved with managed care. Can managed care delivery be simplified or better explained?
- Most rural Oklahomans agree that managed care lowers the cost of health care. All else being equal, this would seem to be an opinion to build upon.
- Health care professionals responding to this survey tend to have a more definitive opinion favorable to managed care. How can managed care plans piggy-back on the inferred status and expertise of these professionals within their communities?
- The working age groups tend to have more defined and positive opinions about managed care. This would auger well for employee-targeted education activities.
- The target groups presenting the most skepticism toward managed care include the young and the old, blue collar workers, housewives and students. These are not homogeneous groups and will not be easy to reach or persuade.

Implications.—The results of this survey suggest that rural Oklahomans are uninformed about

the concept of managed care. While some latent support for managed care on the part of some segments of the rural population is suggested, the study points to other segments which are largely uninformed about managed care. A significant negativity toward the concept of managed care on the part of rural Oklahomans was also detected.

How the opinions of rural Oklahomans compare with their urban counterparts is not known; however, the recent experience in the urban areas with the Medicaid population (under-enrollment and reports of confusion) suggests that a lack of support is widespread. If the responses given by the managed care professional panel reflect the "desired opinion" about managed care, then it is clear that for rural Oklahomans to become better informed about managed care, a widespread education campaign is advisable and needs to begin soon.

Acknowledgment

This work was performed by the Oklahoma Rural Research and Demonstration Center, a collaborative project with the Oklahoma State Department of Health, and the Oklahoma State University College of Osteopathic Medicine through the Center for Health Policy Research and Development, University of Oklahoma Health Sciences Center. Support for this work is provided by the U.S. Agency for Health Care Policy and Research under Cooperative Agreement U54 HSO 8633.

The Authors

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Richard R. Perry, MA, is with Rural Health Projects NwAHEC, as is Mary Jac Rauh, MPH.

John C. Mowen, PhD, is on staff at Oklahoma State University.

Now Accepting Entries
Mark R. Johnson Competition
"Excellence in Medical Writing"

The Editorial Board of the JOURNAL OF THE OKLAHOMA STATE MEDICAL ASSOCIATION and the OSMA Board of Trustees are proud to announce the 1997 Mark R. Johnson Competition—Excellence in Medical Writing.

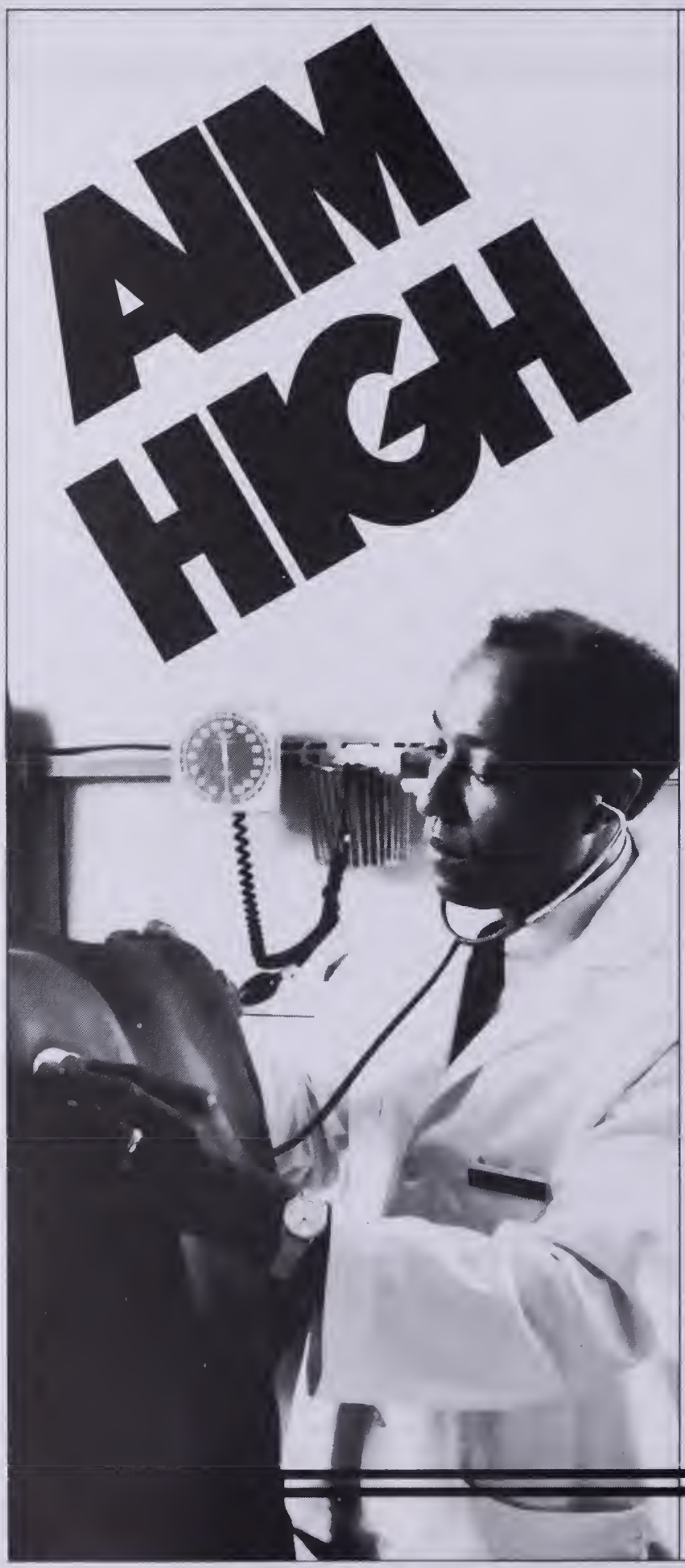
A $500 cash award will be presented to the medical student or resident at the University of Oklahoma College of Medicine (Oklahoma City or Tulsa campus) who, by December 31, 1997, submits the best scientific paper or opinion piece for publication in the JOURNAL.

Entries will be judged by the JOURNAL's Editorial Board at its annual meeting in March 1998 and the winner, if any, will be announced at the Annual Meeting of the OSMA House of Delegates in April 1998. All decisions of the Editorial Board will be final.

The student or resident submitting the paper need not be the sole author, but must be the lead author and must have done the majority of the writing. Entries in the competition should be clearly labeled as such when submitted.

Entries should be mailed to: Mark R. Johnson Competition, OSMA JOURNAL, 601 West I-44 Service Road, Oklahoma City, OK 73118. For additional information, call (405) 843-9571 or 1-800-522-9452.

The memorial trust that funds this competition was established by the friends and family of Mark R. Johnson, MD, who, during his two decades as editor-in-chief of the OSMA JOURNAL, exemplified the very best in both expository and opinion writing in the field of medicine.



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AIR FORCE

Telemedicine raises new liability concerns for doctors

Doctors may be confronting a variety of new professional liability concerns through the use of telemedicine, according to a recent study prepared by the Physician Insurers Association of America (PIAA), a trade association representing companies collectively providing malpractice insurance to 60% of the physicians practicing in the United States.

A new PIAA study, "Telemedicine: An Overview of Applications and Barriers," outlines a number of questions that physicians and their malpractice carriers should consider about the use of telemedicine.

"Telemedicine offers many exciting new possibilities for improving the health care system," said PIAA Loss Prevention and Research Consultant Lori Bartholomew. "To date, however, there is no case law to clarify the role of the telephysician and his potential liability when acting in that capacity."

Some PIAA concerns include:

- Does a remote encounter via telemedicine constitute a physician-patient relationship, thereby creating a legal connection between the parties? For example, if a doctor in another state asks a radiologist to examine a patient's x-ray via telemedicine, has a doctor-patient relationship been established, even though the radiologist has never met the patient? Can the radiologist be named in a malpractice suit filed against the doctor who requested his opinion?
- Where are malpractice claims filed in cases where a doctor has treated a patient in a different state through telemedicine? Since there in no clear guidance regarding were an injured party may bring an action against a physician in these cases, it could create an environment where plaintiffs hunt for the jurisdiction having the greatest potential for lucrative awards. This could lead to a situation where some areas are "red lined" in terms of access to telemedicine.
- Like licensure, malpractice insurance is underwritten to comply with state laws. Insurers will have to develop new products to cover physicians who cross state lines via telemedicine that will address the legal and customary practice issues in distant geographical locations. Also, insurance territorial rating questions may need to be addressed as experience is gained about claims arising from the new treatment modality.

"Currently, the degree of accountability for individual practitioners and jurisdictional issues are questions without answers," said Bartholomew. "We are working to answer these concerns before the full potential of this technology is developed.

Copies of the telemedicine study are available from the PIAA at 2275 Research Blvd., Suite 250, Rockville, MD 20850, (301) 947-9000.

New endowed positions at OUHSC honor Rainey Williams, Doss Lynn

Three new endowed faculty positions at the University of Oklahoma Health Sciences Center (OUHSC), approved by OU regents at their December meeting, will significantly enhance nationally prominent programs in medical education, research, and patient care, OU President David L. Boren announced recently.

The new endowed positions are the G. Rainey Williams, MD, Chair in Surgical Breast Oncology; the G. Rainey Williams Research Professorship; and the Kathryn G. and Doss Owen Lynn, MD, Chair in Neurology—all in the College of Medicine.

"These new endowed positions at the Health Sciences Center are a major step forward as we continue to move up in the national rankings. It is very appropriate that these positions be named for two people who have brought pride to the university," Boren said.

"Dr. Rainey Williams is one of the most gifted and committed educators in the history of our state, and Dr. Doss Lynn, an OU graduate, had a distinguished medical career that included positions with the White House and Walter Reed Army Medical Center in Washington, D.C."

OU will request matching funds for the faculty endowment from the Oklahoma State Regents for Higher Education Endowment Program, which is supported by the Oklahoma Legislature.

(continued)

Rural health association plans March meeting in Seattle

The National Rural Health Association (NRHA) will hold its 20th Annual National Conference on Rural Health May 21-24, 1997, at the Westin Hotel in Seattle, Wash. The theme of this year's conference, "Caring for the Country... Partnerships for Health," reflects the need to build partnerships to give rural health care a stronger base to identify the issues and solutions to today's challenges.

As more authority is being shifted to state governments, rural health professionals need to recognize the increasing importance of health care policy at the state level. Strategies that address the changing shape of Medicare and Medicaid also will be a necessity to health care providers. The 1997 conference program will offer participants the tools to focus on outcomes-based strategies and planning. Objectives for the 20th Annual National Conference include:

- Promoting the building of new partnerships to strengthen rural health care and take advantage of current opportunities;
- Describing fragile rural health systems and successful strategies for strengthening these systems; and
- Recognizing the importance of state policy initiatives to address the increased participation of states in rural health issues.

Leland R. Kaiser, PhD, president of Kaiser and Associates, will present the conference's keynote address. A recognized futurist, Kaiser will speak about the need for collaboration to efficiently use our community health resources. The General Session is to be presented by Jennifer James, PhD, cultural anthropologist, and the Awards Luncheon presentation will be given by Keith Harrell, president of Harrell and Associates.

(continued)

Endowed chairs at OU *(continued)*

To date, 13 endowed positions have been created at OU Health Sciences Center campuses in Oklahoma City and Tulsa during the university's Reach for Excellence campaign. Health Sciences Center programs have a total of 49 endowed faculty positions in the colleges of Medicine, Dentistry, Nursing, and Pharmacy.

The outstanding faculty recruited and retained through these positions contribute significantly to the center's educational programs, which train half of all Oklahoma physicians and many of the states' other healthcare professionals. The faculty positions also enhance the OU Health Sciences Center's success in obtaining external research funding. In the last eight years, this funding has grown by more than 350% and the Health Sciences Center recently obtained the largest grant in its history, a $6.6 million National Institutes of Health award to study vascular disease.

Joseph J. Ferretti, OU Health Sciences Center senior vice president and provost, said the infusion of new endowed faculty positions is important to OUHSC's goal of ranking within the top third of the select 126 colleges in the Association of American Medical Colleges and in the top third of dentistry, pharmacy, nursing, public health, and allied health colleges.

"The new chair in neurology represents a milestone in the strategic development of the department of neurology and will certainly raise the department to a new level," Ferretti added. "I am especially pleased about the endowed positions in honor of Dr. Williams. There is no one in the history of the Health Sciences Center more deserving of this special recognition than Rainey Williams."

The two positions named for Dr. Williams recongize his distinguished 40-year OUHSC career. Williams, chairman of the Department of Surgery since 1974, retired in September.

A campaign, led by Oklahoma City civic and social leader Patricia Browne, has raised almost 200 gifts and pledges totaling $1.8 million for the Surgical Breast Oncology Chair at OU's Institute for Breast Health. The institute, established at Dr. Williams' initiative, is one of the most highly integrated and comprehensive university-based breast health centers in the country.

Browne and her committee are seeking $2 million in private gifts, which, when matched, will make the Williams chair the university's most generously endowed faculty position.

Former residents of Dr. Williams led the drive to establish the G. Rainey Williams Research Professorship, which will be used to attract outstanding medical residents and support their research efforts. The first OUHSC position to be funded primarily by graduate residents reached its $400,000 goal through more than 100 gifts.

Dr. Williams, whose prominent career as a surgeon included pioneering many surgical procedures, is widely regarded as an exceptional teacher and mentor. In 1991, he won the HSC's Stanton L. Young Master Teacher Award. In June 1996 he was featured as one of the JOURNAL's Leaders in Medicine.

The Williams Residency Fellowship fund-raising was led by volunteers Richard Allgood, MD, Donald Garrett, MD, and Judy Garrett, Lawton; Robert Johnson, MD, Boston; and James Rick McCurdy, MD, Norman.

The College of Medicine has received gifts totaling $500,000 from Dr. and Mrs. Doss Lynn of San Antonio, Texas, to establish the Lynn Chair. The endowed position is being established by the Lynns to enable the college to attract and/or retain a clinical scientist who is a national leader and recognized authority in neuroscience and neurology. Dr. Lynn, who is retired, earned his bachelor's degree in 1935 and his medical degree in 1937 from OU.

Dr. Lynn is a retired colonel in the U.S. Army and held the position of chief of medicine at Walter Reed Army Hospital. He also served as medical consultant to the White House in the area of cardiovascular medicine under President Dwight D. Eisenhower.

The education program of the conference is tailored to meet the needs of hospital and clinical administrators, physicians, nurses, researchers, policymakers, educators, and state and federal officials. It will feature almost 70 general and concurrent sessions, topical symposia, and contributed research paper sessions conducted by leaders in the rural health field. Each year the conference draws more than 1,000 participants.

The conference program also includes exhibits and a national awards presentation recognizing outstanding achievement of rural health care providers, practices, programs, education, and research. To receive registration information, contract the NRHA, One West Armour Boulevard, Suite 301, Kansas City, MO 64111; (816) 756-3140; or by e-mail at <mail@nrharural.org>.

Headquartered in Kansas City, Mo., with a government affairs office in Washington, D.C., the NRHA is a nonprofit association composed of individual and organizational members who have a common interest in rural health. Its primary mission is to provide leadership for improving the health and health care of rural Americans through education, communications, research, and advocacy. J

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In Memoriam

1995

Hollis Eugene Hampton, Jr., MD December 1
Herman Carter Moody, MD December 8
Ethan Allen Walker, Jr., MD December 8
John Russell Hubbard, MD December 24

1996

Gerald LeRoy Beasley, Jr., MD January 4
Kerri Dianne Williams, MD January 9
Emanuel Nathan Lubin, MD January 11
Ted Samuel Edward Lewis, MD January 31
Elbert Henderson Shuller, MD January 26
Earl I. Mulmed, MD February 2
Ralph Richard Markland, MD February 10
William Jackson Dowling, MD February 13
Theodore Sherman Williams, MD February 22
John Walker Johnson, Jr., MD March 13
Joseph Jules Maril, MD March 16
Carl Archie Barclay, MD March 21
Thomas Dewey Howard, MD March 21
Hobart Curtis Sanders, MD March 22
Charles Eugene Green, MD March 29
Jane Self, MD March 30
Erma Ossip Johnson, MD April 3
Marlene Marie Normand, MD May 6
Henry Hubert Modrak, MD May 17
James Polk Luton, MD May 21
John Hartwell Dunn, MD May 27
Logan Albert Spann, MD June 7
Coye Willard McClure, MD June 19
James Jackson Gable, Jr., MD July 8
Thomas McNeil Story, MD July 9
Herschel Jerome Rubin, MD July 12
John Andrew Graham, MD July 20
Robert Douglas Anspaugh, MD July 21
Robert Moran Herlihy, MD July 24
Ralph Carrol Denny, MD July
William Allen Heflin, MD August 3
Arnold Gordon Nelson, MD August 26
Ollie Wayne Dehart, MD August 28
Leslie Arvin Arneson September 26
Bertram Edward Sear, MD October 4
Walter Wicker, Jr., MD October 11
Ellis Edwin Fair, MD October 21
William Nathan Oxley, MD October 22
Jesse Day Shipp, MD October 28
William Manning Moore, MD November 28
Charles Leonard Benson, MD December 8
William Norris Harsha, MD December 17
Ronald S. Barlow, MD December 21

1997

Edward J. Tomsovic, MD January 2

From the Oklahoma Poison Control Center

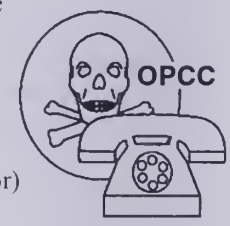
Herbals in Your Practice?

The use of plants and herbs as the first medicines is a worldwide phenomenon. Roots, bark, leaves, fruits, oils, and other plant parts have long been a source of healing. Every culture on earth, through written or oral tradition, has exploited the vast variety of natural chemistry found in plants. Even today, an estimated 20% to 30% of the commercially prepared medications used in clinical practice originate from plants.

Herbal remedies are enjoying renewed popularity with the rising consumer interest in the use of alternative therapies and the mistaken belief that products promoted as "natural" are essentially safe. Between 16% and 20% of the population confess to using some form of herbal therapy.

The most common herbs in current use are:

Echinacea (increase immunity)
Gingko (improve memory, increase cerebral blood flow)
Ginseng (energy)
Guarana (stimulant)
Saw palmetto (prostate problems, impotence)
Ma huang (stimulant, bronchodilator)
Feverfew (migraine headache)
Valerian (sedation)
St. John's wort (tranquilizer, diuretic, MAOI[?])



Medical professionals and the public may not be aware of the side effects and potentially serious adverse reactions that could occur with the use of herbal medicines. In addition, the quality of these products may be uncertain due to the lack of regulation by the Food and Drug Administration and the presence of adulterants or contaminants. Some herbal preparations have been found to contain phenylbutazone, prednisone, indomethacin, diazepam, and other potent medications, or have been contaminated with pesticides or unidentified plant species. As a result, the incidence of health hazards associated with the use of herbal preparations, including hepatic veno-occlusive disease, seizures, renal failure, and anticholinergic poisoning, are increasingly reported in the medical literature.

There is, it would seem, a significant health risk accompanying the use of herbal remedies. Problems in therapy may arise not only from the pharmacological effects of the individual herbal product and its manufactured quality but also from the current medication regimen and disease state of the patient.

When taking a history, the physician should ask not only about the use of over-the-counter drugs but also about the use of medicinal herbal remedies and the ingestion of herbal teas. Recognition of herbal-drug-disease interactions is an important aspect of caring for patients experiencing unexpected, and unexplained, untoward effects.

For a copy of the list of herbals included on the FDA "unsafe list" or for references and further information, contact the Oklahoma Poison Control Center at 1-800-POISON-1.

DEATHS

Ronald S. Barlow, MD
1937 - 1996

Bartlesville native Ronald S. Barlow, MD, died December 21, 1996. Dr. Barlow was a 1962 graduate of the University of Oklahoma Medical School and was on active duty with the U.S. Air Force from 1964 to 1966. He established his urology practice in Oklahoma City after his return from the military.

Charles Leonard Benson, MD
1918 - 1996

Dr. Charles L. Benson, 1943 graduate of the Duke University School of Medicine, died December 8, 1996, in Oklahoma City. Dr. Benson, a native of Coaldale, Pa., was a lieutenant in the U.S. Navy Medical Corps during World War II; he was an orthopedic surgeon at Portsmouth, Va., and later the senior medical officer on board the USS *Marlboro*. After completing his military duty, Dr. Benson completed two more surgical residencies and in 1947 established his practice in Cherokee, Okla. Dr. Benson was a Life Member of the OSMA.

William Norris Harsha, MD
1925 - 1996

Longtime Oklahoma City physician William N. Harsha, MD, died December 17, 1996. An orthopedic surgeon, Dr. Harsha was born in Topeka, Kans., and earned his medical degree from the University of Kansas in 1948. He also earned an MS degree there in 1952 and a JD degree from Oklahoma City University in 1959. Dr. Harsha had a private practice in orthopedic and rehabilitative medicine and had been medical director of The Referral Center since 1980. He served on the Board of Directors of the American Academy of Pain Management. Dr. Harsha was active in volunteer health education work and made many medical missionary trips to third world countries, ranging from China and Australia to Central and South America and including North Africa.

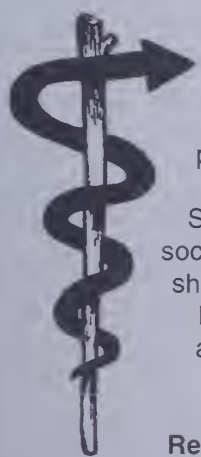
William Manning Moore, MD
1928 - 1996

OSMA Life Member William M. Moore, MD, retired Tulsa internist and cardiologist, died November 28, 1996. Dr. Moore was born in Oklahoma City and was a 1955 graduate of the University of Oklahoma Medical School. From 1957 to 1959, he served on active duty with the U.S. Army. Dr. Moore joined the Springer Clinic in Tulsa in 1961.

Edward J. Tomsovic, MD
1922 - 1997

San Francisco native Edward J. Tomsovic, MD, a 1946 graduate of the University of California, San Francisco, died January 2, 1997, in Tulsa. Dr. Tomsovic served with the U.S. Army from 1949 to 1969 before accepting a post at University of California, Irvine Medical Center, as assistant dean of professional affairs, adjunct professor, and medical director. In 1979 he moved to Tulsa to become dean of the University of Oklahoma College of Medicine–Tulsa. He stepped down from the post in 1991, retaining his tenured professor status and teaching pediatrics at the college. In 1993 he completed a five-year appointment as councilor of Oklahoma for the Southern Medical Association. Dr. Tomsovic was awarded an OSMA Life Membership in 1995.

First Call for Resolutions



All resolutions to be presented to the Oklahoma State Medical Association House of Delegates Annual Meeting must be received in the OSMA executive offices not later than thirty (30) days prior to the meeting. This year's meeting will be April 24-27, 1997, at the Southern Hills Marriott in Tulsa. County medical societies or individuals wishing to submit resolutions should mail them to OSMA, 601 West I-44 Service Road, Oklahoma City, OK 73118. If you need assistance in drafting such resolutions, please contact the executive offices.

Resolutions must be submitted on or before March 25, 1997

CORRECTION

Kieffer Dixon Davis, MD
1913 - 1995

The JOURNAL was informed recently that Life Member Kieffer D. Davis, MD, (not Dixon D. Kieffer, as was reported in the December JOURNAL) of Bartlesville died August 27, 1995. A specialist in occupational medicine, Dr. Davis earned his medical degree in 1938 at the Louisville (Ky.) School of Medicine. He served as a member of the AMA's Council on Occupational Health, and in 1972, as medical director of Phillips Petroleum Company, was named Physician of the Year by the President's Committee on Employment of the Handicapped. The award is co-sponsored by the AMA. Dr. Davis was named an OSMA Life Member in 1982.

Capsules

■ **The following OSMA members are serving on the Medical** Advisory Committee (MAC) of the Oklahoma Health Care Authority (OHCA). Frank F. Wilson III, MD, Oklahoma City ob/gyn, MAC chair; Don L. Wilber, MD, Midwest City pediatrician, MAC vice chair; Jerry R. Nida, MD, Oklahoma Commissioner of Health; and Steven A. Crawford, MD, Oklahoma City family physician. Osteopathic physicians on the committee are Stanley E. Grogg, DO, Tulsa, and Richard Langerman, DO, Oklahoma City. Future meetings of the MAC will be held on February 27, April 24, June 26, August 28, October 30, and December 18.

OSMA Executive Director Michael Sulzycki also serves on the committee.

Classifieds

Classified ads are 50 cents a word, with a minimum of $25 per ad. A word is one or more characters bounded by spaces. Box numbers will be assigned upon request and will add 6 words to the total. Payment must accompany all submissions. Orders will NOT be accepted via telephone or fax. Mail ad with payment to OSMA JOURNAL, 601 West I-44 Service Road, Oklahoma City, OK 73118. Deadline is the first of the month preceding the month of publication.

Physicians Wanted

PHYSICIAN. Family Practice, current unrestricted Oklahoma licensure or eligible. Must be board certified/eligible. The Oklahoma City Indian Clinic serves a Native American population of over 45,000 representing over 100 different tribal groups. The Clinic is open Monday through Friday, 8 a.m. to 5 p.m. Experience preferred in an outpatient public health or community health agency. Salary plus benefits. Indian preference laws apply. Send CV/resume to: Personnel, OKC Indian Clinic, 4913 W. Reno, OKC, OK 73127.

The Department of Family and Preventive Medicine, University of Oklahoma Health Sciences Center, Enid, Oklahoma, announces a search for a Family Physician faculty member with interests in teaching, ambulatory research and promotion of family practice in rural settings. The successful candidate will be a graduate of an accredited College of Medicine, possess or be eligible for an unrestricted Oklahoma Medical License. ABFP board certified or board eligible with preferred background of 5 years in a private family practice setting. The faculty position is in the rural community based Family Practice Residency program in Enid, Oklahoma. The program has 12 residents in a 2 and 1 program. Duties include coordination of rural training projects and maintaining patient, faculty and academic responsibilities. For further information contact J.M. Pontious, MD, Program Director, OU/Enid Family Medicine, 620 Madison, Suite 304, Enid, Oklahoma 73701. For questions, call 405-242-1300; Fax 405-233-3721; Internet <mike-pontious@uokhse.edu>. Excellent benefit package provided. The University of Oklahoma is an Equal Opportunity/Affirmative Action Employer.

GASTROENTEROLOGIST, PEDIATRICIAN, PSYCHIATRIST and COUNSELOR wanted for Southern Plains Medical Center, 35 physician multispecialty group in Chickasha OK. Located 35 miles southwest of Oklahoma City on Interstate 44, family oriented college community of 17,000 with service area of 110,000 people. Outstanding medical center with ambulatory surgery center. 156-bed hospital next door. Excellent guarantee and benefits. Contact Jeanie Bledsoe, 2222 Iowa, Chickasha OK, 405-222-9583 or 405-224-5507.

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Instructions for Authors

Contributions

Articles submitted for publication become the sole property of the JOURNAL and must not have been published elsewhere. The Editorial Board reserves the right to edit any material submitted. Manuscripts must be typewritten or printed in a standard typeface, double-spaced, and submitted in quadruplicate (original and three copies). **In addition, authors are *required* to submit their manuscripts on computer disk, preferably in WordPerfect (any PC version) or text format. Label disk clearly with title and author.** The cover letter should include the following statement, signed by all authors: "In consideration of the publication of this work by the *Journal of the Oklahoma State Medical Association* ("JOURNAL"), the author(s) hereby grant(s), assign(s), or otherwise convey(s) to the publisher all rights, titles, and copyright ownership to the JOURNAL in the event that such work is published by the JOURNAL."

Any material reprinted from another source must be accompanied by written permission from that source to use the material in the JOURNAL.

Style

All manuscripts should approximate the style adopted by the American Medical Association as seen in *JAMA* and detailed in the AMA's *Manual of Style*. When appropriate, an abstract of 150 words or less should accompany the paper and should state the exact question considered, the key points of methodology and success of execution, the key findings, and the conclusions directly supported by these findings.

Bylines may contain no more than six (6) names and shall include only those individuals who can attest that they have contributed to the conception and design, or analysis and interpretation of data; and to drafting the article or revising it critically for important intellectual content; and to final approval of the version to be published. Other contributors may be recognized in an acknowledgment.

References are to be listed in the order of their appearance in the article, and in the style used in the JOURNAL and *JAMA* (author, title, publication, year, volume number, pages). Footnotes, bibliographies, illustrations, and legends should be on separate sheets.

Illustrations

Illustrations other than the author's will not be accepted for publication unless accompanied by written permission from the original source. Illustrations should be labeled with the author's name and must be numbered in the order in which they are referred to in the article. The quality of all illustrations must be in keeping with the quality and style seen in the JOURNAL.

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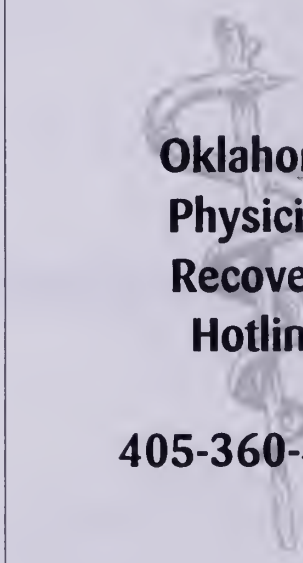
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I became a member of the Oklahoma State Medical Association Alliance in 1985, the year my surgeon husband opened his practice in Oklahoma City. Several of us who had been members of the Medical Student/Resident Physician Spouse Program at the University of Oklahoma Health Sciences Center joined at the same time. For me, I thought it would be a good way to get involved and meet other members of the medical community. My mother-in-law was a past president and active member of our county alliance and she encouraged me to join. Little did I know how rewarding my involvement would be.

Membership in the Oklahoma State Medical Association Alliance offers many opportunities for the physician spouse. Our state alliance, in conjunction with the AMA Alliance, has made great strides over the years in impacting legislation, fund-raising for medical education and research, and in organizing health promotion efforts. In 1995, the SAVE program was launched to Stop America's Violence Everywhere. Violence has been termed our nation's number one health crisis by the American Medical Association. The SAVE program encompasses efforts around the country as well as in Oklahoma which affect the lives of the many Americans who have suffered the devastating effects of violence. Through this health promotional initiative, the AMA Alliance not only is having an impact on today's problems but also will affect future generations. Other benefits of membership include the excellent and informative publications from the national and state organization. These allow us to communicate and share our activities.

My reasons for being involved in the alliance can best be summed up in these words written by Mrs. Anne Garrison, our state alliance president in 1938-39; she wrote, "The world doesn't get better by sitting back and watching events go by. We can't always win in our efforts to make it better, but if we have done our best then at least we are able to live with ourselves and face what comes with the conviction that we tried. Real happiness in life comes only to those who grow and broaden their horizons to include the welfare of their fellow man and participate actively in the events of their days. As doctors' spouses we have a unique opportunity to fulfill this mission. May we never fail to use our talents and our good minds to this end."

Membership in the Oklahoma State Medical Association Alliance is open to the spouse of any physician who is a member of the OSMA. In counties where there is no organized alliance a spouse may join the state alliance as a member-at-large. For membership information call Judy Lake at the OSMA offices, 405-843-9571.

—Diane Cooke
OSMAA First Vice-President

THE LAST WORD

■ **The Oklahoma State Medical Association has a new** staff member. Barbara Matthews joined the staff in November as administrative assistant to OSMA Executive Director Mike Sulzycki. Ms. Matthews comes to the OSMA from Oklahoma City University where she coordinated activities of adult, non-traditional students.

■ **By now physicians should have received their *1997 OSMA Physicians Directory.*** Any errors discovered in the listings should be reported to the OSMA so that membership files can be corrected. Use the correction form provided in the directory and mail to: Membership Coordinator Judy Lake, OSMA, 601 West I-44 Service Road, Oklahoma City, OK 73118. A list of these corrections will be compiled and published in the JOURNAL.

Additional copies of the directory may be ordered using the form provided in the directory or by calling Toni Farrar at the OSMA, 405-843-9571 or 1-800-522-9452. Copies are $25 each for members and $50 each for non-members. Bulk orders of 10 copies or more will be $25 per copy. Checks payable to the OSMA should accompany all orders.

■ **The listing of OSMA Internet Advisory Committee** members on page 171 of the *1997 OSMA Physicians Directory* is incomplete. The list should also include Timothy A. Walker, MD.

■ **Oklahoma primary care physicians are urged to complete** the Oklahoma Child Health Primary Care Assessment Provider Survey they received recently. Although lengthy, the survey will provide valuable information to the Oklahoma State Department of Health (OSDH). Physicians who need an additional copy of the provider survey form should call Edd D. Rhoades, Jr., MD, at OSDH, 405-271-4477.

■ **Shortly after his reelection, Oklahoma Congressman** and physician Tom Coburn, MD, personally called the Oklahoma State Medical Association to emphasize that health care legislation recently signed by President Clinton contains strong sanctions for physicians involved in false home health certifications. Home care is the fastest growing part of Medicare.

The legislation penalizes physicians who certify that an individual is eligible for home health services if that physician has knowledge that the individual does not qualify for home care. Currently a Medicare patient cannot receive home care benefits without physician certification of the need for skilled care and the patient's homebound status. The legislation penalizes physicians making invalid certifications the greater of $5,000 or three times the amount of Medicare payments made on behalf of the ineligible patients.

■ **Carole Smith, who has served for years as the executive** director of the Oklahoma Board of Medical Licensure and Supervision (OBMLS), has announced she will retire on March 31, 1997. During her tenure as executive director, she has been recognized by the Federation of State Licensing Boards for her innovations and accomplishments.

■ **The contract between the federal Health Care Financing** Administration (HCFA) and Arkansas Blue Cross and Blue Shield to process Medicare Part B claims in Oklahoma and New Mexico will take effect on or before August 1, 1997. Arkansas Blue Cross has administered Medicare claims in that state since 1966. It was awarded the Medicare Part B contract in Louisiana in 1984.

Arkansas Blue Cross employs some 220 people in Little Rock to administer Medicare claims in Arkansas, about 200 employees in Baton Rouge for Louisiana operations and will employ approximately 170 employees to administer the Part B program in Oklahoma and New Mexico.

The employees who currently work in Aetna's Oklahoma City operation (and three in an Albuquerque customer service office) will be given an opportunity to interview with Arkansas Blue Cross. The company expects to retain most of the current Aetna employees.

Native Oklahoman Danny Day, operations manager of the Arkansas Blue Cross in Louisiana, will leave Baton Rouge to take over the Oklahoma City operation. "We are going to work really hard to make this change positive for everyone involved—Medicare Part B beneficiaries, providers, and the employees who serve them," said Charlie Clem, Arkansas Blue Cross vice president for public programs. "We don't want to do anything that would compromise the service that Medicare beneficiaries in Oklahoma and New Mexico both expect and deserve."

■ **University Physicians Medical Group, the physician** practice of the University of Oklahoma College of Medicine, will open its first primary care satellite practice in Midwest City in February 1997, according to UPMG Chief Executive Officer Mike Duncan. The practice will initially employ a staff of six, including two physicians, Gerocgr Tardibono, MD, general internist, and David L. Rogers, MD, family practitioner. University Physicians Medical Group, the name recently adopted by OU physicians in the College of Medicine, includes practices in 16 clinical specialties and numerous subspecialties. In 1995, UPAG physicians practicing at the University Hospitals were ranked number one in the state in 12 specialties by *U.S. News & World Report* in its annual "America's Best Hospitals" survey. Specialties in which UPMG physicians excelled included cancer, cardiology, gynecology, urology, gastroenterology, and orthopaedics. UPMG physicians also are the state's primary source of medical education in the training of Oklahoma's doctors. The 3,700+ square foot clinic will feature five exam rooms and one procedure room; it is designed to incorporate future expansion and the addition of up to three physicians.



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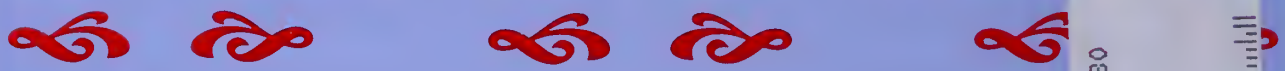
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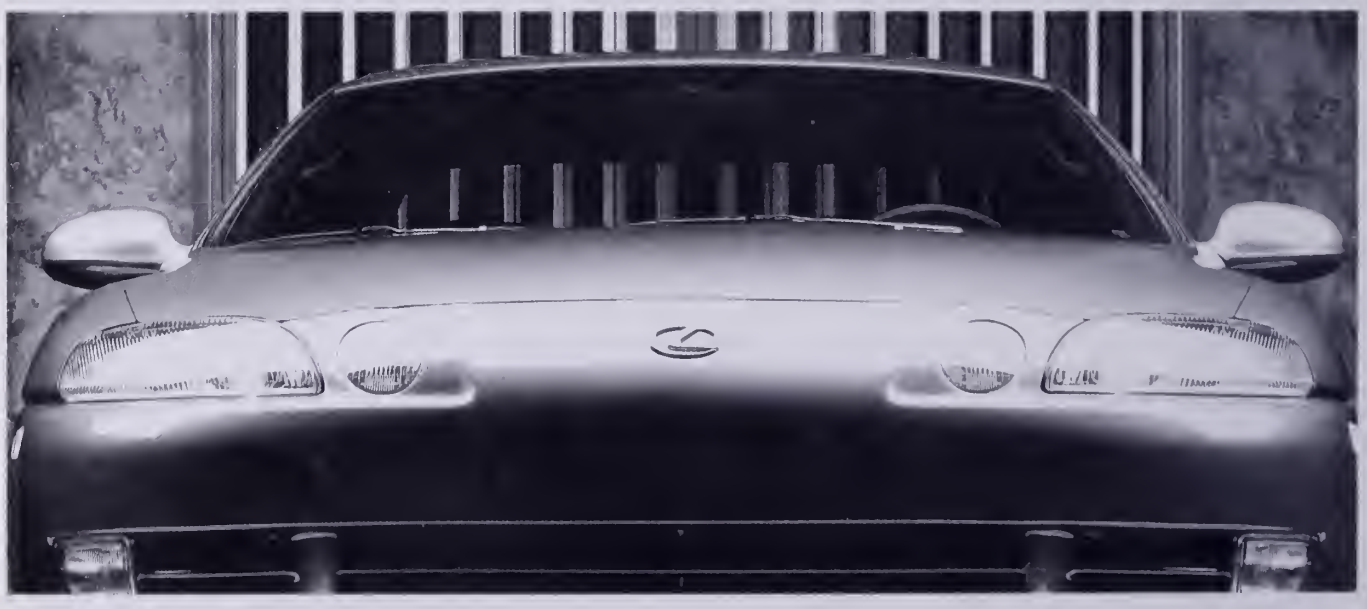
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JOURNAL

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FEBRUARY 1997 VOL. 90, NO. 2

EDITORIAL

Warning: Spring Flooding 43
R.V. McINTYRE, KINGFISHER

PRESIDENT'S PAGE

Healthcare Reform—Our Input 44
D.L. HARPER, TULSA

SCIENTIFIC

Scaphoid Fractures in Soccer Goalkeepers 45
J.R. GREEN, JR.; G.M. RAYAN; OKLAHOMA CITY

SPECIAL

Accreditation: Who's Counting? 48
W.H. OEHLERT, S.D. KETRING; OKLAHOMA CITY

Learning Curves:
Leaders in Medicine—Edward R. Munnell, MD 54
R. GREEN; OKLAHOMA CITY

NEWS

Your voice in Washington, 67... Oklahoma capitol contacts, 67... Elkins receives Dean's Award, 70...

DEPARTMENTS

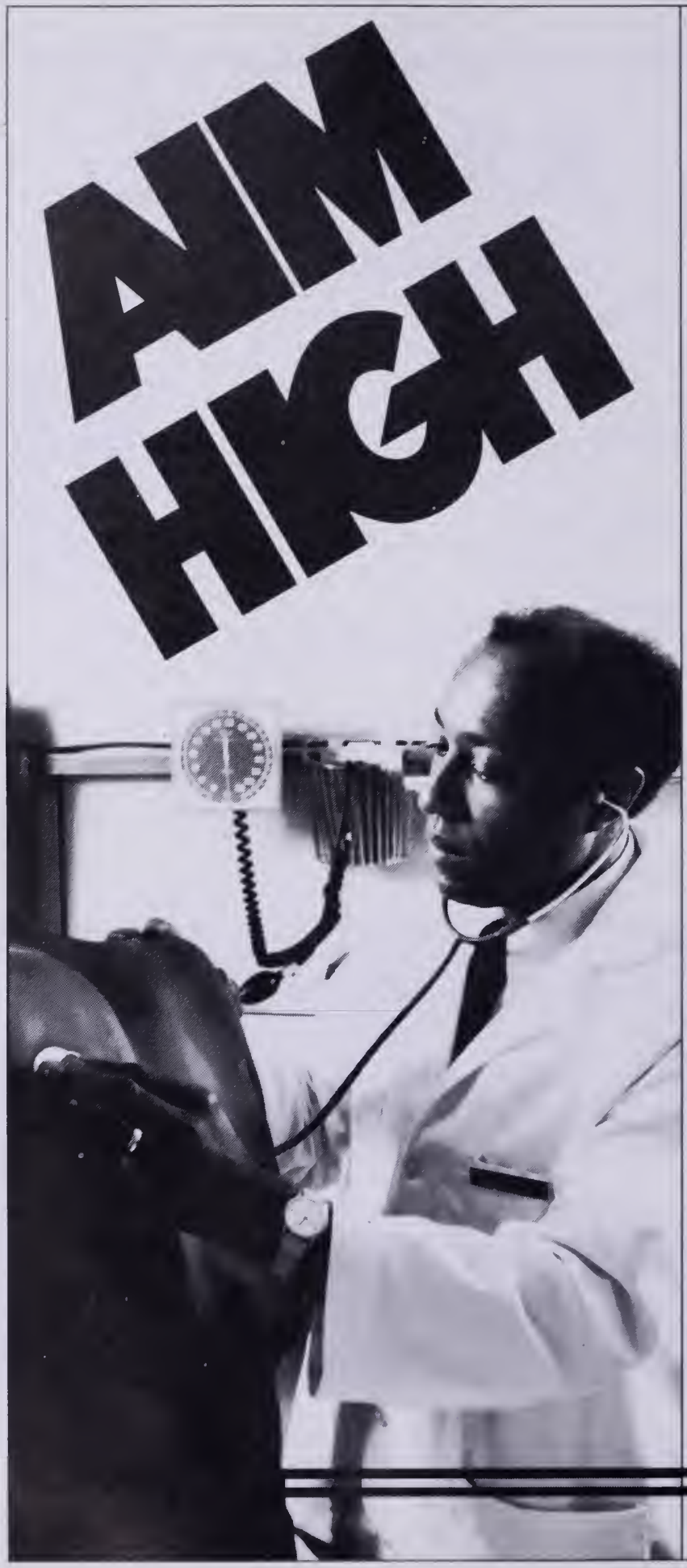
Health Department, 72... Capsules, 74... Letters, 74... Deaths, 75... In Memoriam, 75... Classifieds, 76... Alliance, 83... The Last Word, 84

ABOUT THE COVER

Edward R. Munnell, MD, retired Oklahoma City thoracic surgeon, is featured this month as a JOURNAL Leader in Medicine. He is the 33rd Oklahoma physician to be recognized in this way. Story begins on page 54.

Art direction by Greg Gilpin, Graphic Arts Center, Inc., Oklahoma City.





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AIR FORCE

Warning: Spring Flooding!

Every year at this time there is a flood of legislative bills introduced in the State Legislature that number in the thousands, and any one of these bills *may* come to rule the citizens of Oklahoma. Nearly always, several hundred of these bills relate to medical matters and propose to modify the practice of medicine through legal coercion. Nearly all of these medical proposals are drafted by laymen or lawyers without medical training and with scant knowledge of patients' medical necessities. Only a very few proposals in this annual deluge have physician consultation or input during drafting.

Therefore, it is not too surprising to find that in the real world many medical bills produce unanticipated and/or harmful side effects that surprise and chagrin the authors, who then may ask: "Why didn't the doctors warn us about this before we passed it?" Unfortunately, it is probably true that legislators listen poorly to physicians, but it is also true that physicians all too rarely weigh in with their opinion on proposed legislation.

Presently the regulation of managed care is one "hot button" legislative issue receiving considerable attention. The OSMA and Dr. Brandt's Council on State Legislation and Regulation are active in the dialog on this controversial topic. It is a subject worthy of intense discussion by every physician and every legislator. The notion is too widely prevalent that managed care represents the "final solution" to all current medical economic access problems. But in truth the realities of human behavior are such that the present day concept of managed care must be looked upon as merely a temporary way station on the road to an economic medical system wherein every patient has the fiscal and medical freedom to determine exactly his or her own personal future.

Managed care will require many years of debate and trial for resolution, and we should take note that several dozen other issues are also included in the yearly flood of medical bills. These subjects are variably controversial, but all would benefit from analysis by medical professionals.

Read some proposed bills.

Call or write your legislator!

Kay V. McIntyre, M.D.

Physicians all too rarely weigh in with their opinion on proposed legislation.

An editorial is a column of personal opinion that may or may not reflect the official position of the OSMA.

PRESIDENT'S PAGE

Healthcare Reform—Our Input

As healthcare reform continues in the United States, Americans seem to have three somewhat incompatible demands—immediate access to care, cost containment, and maintaining the highest quality of healthcare. Delivery of two out of three is certainly feasible, but maintaining all three may not be possible. It is becoming obvious that a monumental change in our system is not forthcoming in the present climate but that incremental changes will continue. The Insurance Reform Bill (Kennedy-Kassebaum) in an example of recent national legislation which has been successful.



We, as physicians, must not let major healthcare reform occur without our input.

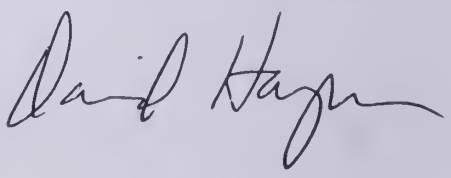
While Congress insists on addressing (and rightly so) waste, fraud, and greed in our system, it also must acknowledge and address other obvious causes of rising healthcare costs. The ever increasing number of elderly patients, the increase in expensive high-tech care, the impact of AIDS, costly care such as organ transplants and dialysis for all age groups, neonatal intensive care efforts, increasing numbers of illegal immigrants, and the increasing uninsured population all need to be addressed before we have comprehensive healthcare changes which are meaningful. Legitimate tort reform must eventually be available. While real malpractice should be punished, our country must realize that every patient-physician contact will not have a perfect result.

The high price of new drugs has an impact on cost, but new medicines are very expensive to develop and pharmaceutical companies need to be reimbursed in a fair way for costly research and development. We also must strive to maintain adequate funding to continue our very important medical research for which the United States is recognized throughout the world.

As doctors, we have a wonderful opportunity to communicate with our patients; but we should remember to address healthcare changes not as financial issues affecting physician incomes, but as patient care issues. Patients should understand how changes in our system may affect *them* and not just *us* as physicians.

Prime examples include (1) Gag Rules—Why is the reform of gag rules in managed care contracts important? We should explain that it is not the gagging of the doctor that is important but rather the limiting of information to a patient regarding his or her available choices of treatment.(2) Medicare—It is apparent that patients (i.e., voters) oppose major reductions in Medicare spending. Patients need to understand that tightening Medicare caps on physician charges may eventually lead to less access to physicians for Medicare patients. (3) Capitation—While not all capitation models are detrimental, incentives not to treat may affect physician decisions and referrals, which may ultimately affect patient care. (4) Managed care—More and more layers of paperwork and extra time spent in administration of managed care may delay treatment, needed tests, surgery, and necessary referrals. Patients need to understand this and that these aspects of managed care certainly can be improved.

We all need to talk with our patients and legislators about the above issues. Concentrate on patient interest issues and not doctor income issues. We must stress the maintenance of high quality healthcare for our patients as our first and foremost concern. We, as physicians, must not let major healthcare reform occur without our input; and we should realize that support from informed patients can make a major difference in our influence and how effective we ultimately will be.



Scaphoid Fractures in Soccer Goalkeepers

Jomes R. Green, Jr., MD; Ghazi M. Rayon, MD

The growing popularity of soccer in this country has led to an increasing number of soccer-reloted injuries. Epidemiologic studies report thot soccer-reloted musculoskeletal injuries most frequently involve the lower extremities. These ronge from 56% to 95% of soccer injuries ond ployer-to-player contact is the most common mechanism of injury.[3-6] Upper extremity musculoskeletol injuries are less frequent, but hove been reported, with goalkeepers being the most susceptible.[1,4] There is o poucity in the literoture regarding bony injuries obout the wrist ond hand among goolkeepers. The purpose of this article is to report three soccer-related scaphoid froctures and nonunions in two goolkeepers.

Case #1

A 35-year-old right-handed male school teacher and recreational soccer player presented with chronic left wrist pain. Five months earlier, he had sustained a hyperextension wrist injury while blocking a soccer ball. He was the team's goalkeeper. He experienced severe wrist pain for which initial x-rays were obtained and reported as normal. He was offered no treatment. His pain persisted and became aggravated by activities that load the wrist in extension such as pushups. He continued his sports activities despite the increasing pain.

Examination revealed a limited range of motion with pain at the extremes of wrist flexion and extension. He had tenderness in the anatomic snuffbox, scapholunate interval, and pain provoked by the scaphoid test (radial deviation of the wrist while stabilizing the scaphoid). The remainder of the examination was normal. X-rays showed a fracture nonunion of the scaphoid waist along with cystic formation and carpal collapse on the lateral view (Fig. 1). Anteroposterior and lateral x-ray views from the initial injury were available and the fracture was not readily visible.

The patient was counseled regarding his diagnosis and treatment options were discussed. He elected to have surgery. Iliac crest bone grafting (ICBG) and Herbert screw (Zirnmer, USA) fixation were done. The postoperative course was uncomplicated. Cast immobilization of the wrist was continued for nine weeks, followed by protected range of motion exercises. At sixteen weeks post-operatively he had no pain with active or passive range of motion. He had no tenderness in the anatomic snuffbox or scapholunate interval, and provocative tests were negative, including the scaphoid test and loading the wrist in extension. X-rays showed solid healing and incorporation of the graft within the proximal and distal poles of the scaphoid, and the carpal collapse had improved (Fig. 2). He was seen last at six months; contact sports, including soccer, were resumed. He returned to full activity without pain.

Case #2

An eighteen-year-old right-handed male presented with a six-month history of right wrist pain. His field position was goalkeeper, and he sustained a

Most goalkeeper injuries involve the upper extremity and constitute one-third of all hand injuries in soccer.

Direct correspondence to Ghazi M. Rayan, MD, Physicians Building D, 3366 Northwest Expressway, #700, Oklahoma City, Oklahoma 73112.



Figure 1. Wrist x-roy shows nonunion of the scophoid with cystic formotion.



Figure 2. Wrist x-roy four months ofter wedge bone grofting ond Herbert screw fixotion shows heoling ond incorporotion of the groft into the proximol ond distol poles of the scophoid.

hyperextension injury to the right wrist while blocking a soccer ball. He experienced immediate swelling and pain about the dorsal and radial wrist. He sought no medical treatment at that time, but continued to experience wrist pain that intensified with sports and activities of daily living.

Examination revealed painful limitation of wrist motion. The pain was most severe with extremes of wrist flexion and extension. Wrist tenderness was noted in the anatomic snuffbox and the scapholunate interval. X-rays showed a fracture nonunion through the proximal pole of the scaphoid with marginal sclerosis and mild carpal collapse. Magnetic resonance imaging (MRI) identified the nonunion and confirmed that the proximal pole was avascular.

The patient was treated with thumb spica cast immobilization. After one month, he elected to have surgery in the form of ICBG and Herbert screw fixation. The postoperative coarse was uneventful. Wrist immobilization was continued for six weeks, and the patient began protected range of motion exercises. At eighteen weeks postoperatively, x-rays showed bony healing and incorporation of the graft in spite of the avascular nature of the proximal pole. Immobilization was discontinued and contact sports were resumed two months later.

Two years after his last clinic visit, the patient presented with complaints of left wrist pain. He described a hyperextension injury to the left wrist during a game while in a goalkeeper position two weeks earlier. Physical examination and x-rays confirmed the diagnosis of an acute scaphoid fracture. The wrist was immobilized in a short arm thumb spica cast. After three months of immobilization there was no clinical or x-ray evidence of healing. Therefore he elected to have surgery. He underwent ICBG. Herbert screw fixation was not done because adequate stability was achieved and because of the small size of the proximal pole. The postoperative course was uncomplicated and the wrist immobilization and therapy program were similar to that of the contralateral wrist. The patient had no pain with range of motion of the wrist and no tenderness with palpation or provocative maneuvers. X-rays showed incorporation of the graft. Six months postoperatively he resumed all athletic activities without pain.

Discussion

The role of the goalkeeper is to keep soccer balls that have been kicked or headed from entering the net he protects. In doing so, the goalkeeper most commonly uses his upper extremities, thereby predisposing them to injury. Soccer injuries of the hand from ball contact are uncommon among players in the field. A review of soccer injuries based strictly on field position showed that 14% of all injures occur in goalkeepers.[4] Soccer inju-

ries are more likely to occur among individuals who participate at a recreational level than among those competing at a highly skilled or professional level.[6]

Curtin and Kay evaluated soccer related hand injuries in England. They report that most goalkeeper injuries involve the upper extremity and constitute one-third of all hand injuries in soccer. Sixty-nine percent of goalkeeper hand injuries reportedly resulted from direct contact with the ball.[2] The thumb and boarder digits, i.e., index and small, are most commonly affected.[1,4] Ring avulsion injuries have also been reported.[8]

We are aware of only two reported cases of scaphoid fractures[2] and no reports of nonunions in goalkeepers. Wrist hyperflexion is the mechanism of injury in these athletes. This has been produced experimentally. The force transmitted to the radioscaphoid articulation was four times greater than is applied to the palm.[9] We believe that wrist hyperextension is the mechanism that accounts for the injuries in our reported cases.

Fractures of the scaphoid are the most common of all fractures involving the carpal bones.[7] Scaphoid nonunion often results from the difficulty of radiographic diagnosis. In order to increase the diagnostic yield, we recommend five projections; anteroposterior, lateral, proration oblique, supination oblique, and scaphoid elongation view.

Other than gloves, protective equipment for the upper extremities is not routinely worn by goalkeepers. Wrist taping or splinting will prevent extreme hyperextension and theoretically can minimize the chance of scaphoid injuries. This may be indicated in goalkeepers at a high risk for wrist injury, as in our patient #2. However, the purpose of this report is to call attention to these injuries for those who work with and care for sports teams. Awareness of such injuries, in the context of adequate physical examination and appropriate x-ray studies may prevent a delay in diagnosis. J

Scaphoid nonunion often results from the difficulty of radiographic diagnosis.

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Imperfect as they may be, claims-based administrative data are used by payors to draw conclusions about physician efficiency

Accreditation: Who's Counting?

W.H. Oehlert, MD; Susan D. Ketring, CMSC, CPHQ

Active physician involvement and leadership in their accreditation process can produce a cubic win for patients, payors, and providers. For health care quality to improve and everyone win, physicians need to understand the accountability system, the what and why of data collection, and be involved in short- and long-term performance assessments.

Whether you like it or not, your performance is being scrutinized by groups over which you have no control. Imperfect as they may be, claims-based administrative data are used by payors to draw conclusions about physician efficiency. Medicare claims data are publicly available, and many states, including Oklahoma, have laws requiring collection and reporting of hospital discharge data for all payors. Some states and localities have already published "report cards" including physician-specific outcome measurements such as mortality rates.

One context in which your performance is being measured and judged is through the credentialing, profiling, and quality measurement mechanisms of the health plans in which you participate. Health plans which are accredited by one of several accrediting bodies are already subject to accreditation standards which require mechanisms for physician accountability; other health plans are in the process of seeking such accreditation.

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It behooves physicians to have an awareness of these external forces and their impact.

What Is Accreditation?

To accredit is "to endorse or approve officially."[1] In health care, accreditation represents a "seal of approval" obtained by an organization which submits its records, processes, and staff for on- or off-site inspection against standards established by the accrediting body. Most physicians are familiar with the hospital accreditation survey process, having helped prepare for survey, most often addressing issues related to medical records, quality improvement, credentialing, and medical staff bylaws.

How does accreditation differ from regulation? The voluntary nature of accreditation is the most significant factor distinguishing it from regulation. Although a hospital may choose not to pursue accreditation by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and a health plan may choose not to pursue accreditation by the National Commission on Quality Assurance (NCQA), neither can choose not to undergo application and inspection for state licensure. A parallel for physicians is the difference between state licensure, which is required in order to practice medicine, and board certification, which is a voluntary pursuit. Like board certification for physicians, however, accreditation is becoming less "voluntary" for health care organizations and more a fundamental expectation by patients and purchasers of health care services.

Who Are the Accreditors?

The oldest and best-known accreditor in health care is the JCAHO, which has accredited hospitals since 1951 and in more recent years has included in its accreditation program other health care organizations, including integrated delivery networks. The non-profit JCAHO is governed by a Board of Commissioners with public members, a nursing representative, and representatives of the American College of Physicians, American College of Surgeons, American Dental Association, American Hospital Association, and the American Medical Association. According to JCAHO, which evaluates and accredits more than 5,000 hospitals and more than 3,600 other health care organizations, its mission is "to improve the quality of health care provided to the public."[2]

JCAHO has recently been charged by a consumer advocacy group, Public Citizen, with being too easy on the hospitals it evaluates.[3] A new report from Public Citizen says the JCAHO accredits 99 percent of the hospitals it surveys, even though it finds that a high percentage have serious problems in physician credentialing, infection control, surgery and anesthesia, and pharmacy services. Public Citizen urged the federal government to investigate the JCAHO's alleged conflict of interest (it surveys facilities on whose business it depends), and to shift accreditation responsibilities to state and federal agencies. The Joint Commission and the American Hospital Association defended the current system, saying that while the accreditation process could be improved, the surveys are objective and tough.

JCAHO's recent addition of a Network Accreditation Program includes accreditation of HMOs and is a competitive response to the increasing prominence of the National Committee on Quality Assurance's accreditation program for health plans. According to JCAHO, "our health care network accreditation program is distinguished by its cutting-edge standards and performance measures and for the adaptability of our rigorous evaluation to emerging new forms of health care networks and the ever-changing health care marketplace."[4]

Since JCAHO's network accreditation program began in 1995, seven health care networks have been accredited. NCQA has reported that close to half of the nation's 574 HMOs have already been reviewed as part of its accreditation process for managed care organizations[5], making it by far the leader in accreditation for health plans.

According to NCQA[6], accreditation status is not a guarantee of the quality of care for an individual patient from an individual physician or other providers. Accredited plans have, however, demonstrated that they provide the consumer protections required by NCQA standards and that they closely monitor, and are continuously improving, the quality of care they deliver.

NCQA is an independent, not-for-profit organization "dedicated to assessing and reporting on the quality of managed care plans, including health maintenance organizations (HMOs)."[7] It is governed by a Board of Directors that includes employers, consumer and labor representatives, health plans, quality experts, regulators, and representatives from organized medicine.[8]

NCQA's mission is to provide information that enables purchasers and consumers of managed health care to distinguish among plans based on quality, thereby allowing them to make more informed decisions. NCQA's efforts focus on two activities, *accreditation* and *performance measurement* (report cards), which are complementary perspectives for producing information to guide choice. In the future, these activities will be integrated.[9]

Health plans will be held to tougher standards under NCQA's new quality measurements, though the plans still won't have to report actual outcomes of patient care.[10] The new Health Employers' Data Information Set (HEDIS) 3.0 requires plans to release more information on care of patients with breast cancer, heart attacks, HIV, diabetes, abnormal pap smears and mammogram, and those who smoke. HEDIS is a set of performance measures devised in 1989 by a group of large corporations and HMOs in an attempt to simplify and standardize the quality data which employers sought from health plans. NCQA adopted the system, released two updates, and expected to release version 3.0 by the end of 1996.

While NCQA and JCAHO are best known in the accreditation arena, other accrediting groups are becoming contenders in managed care, including the Accreditation Association for Ambulatory Health Care (AAAHC) and the Utilization Review Accreditation Commission (URAC).[11]

Formerly an arm of the JCAHO, AAAHC has accredited approximately 465 organizations, 11 of which are HMOs and the rest sub-components of health-care delivery such as ambulatory center, surgery centers, and medical groups. Recognizing that NCQA is currently the dominant HMO accreditor, AAAHC's executive director says his organization wishes to remain an alternative accreditor for HMOs. Survey applications increased by about 50% in 1995, attributed in part to the trickle-down effect of accreditation-seeking health plans asking their surgery centers and

JCAHO has recently been charged by a consumer advocacy group, Public Citizen, with being too easy on the hospitals it evaluates.

Comparison of Major Accreditation Bodies

Characteristics	National Committee for Quality Assurance (NCQA)	Joint Commission on Accreditation of Healthcare Organizations (JCAHO)	Utilization Review and Accreditation Commission (URAC)
Orgonization Type & Governance	Founded in 1979, not-for-profit, governed by boord with representatives of employers, consumers, labor, health plans, quality experts, regulotors, orgonized medicine.	Founded in 1951, non-profit, governed by board with representatives of ACP, ACS, ADA, AHA, AMA, public and nursing.	Founded in 1990 by the Americon Monoged Care Review Association ond the AMA; recently ocquired the American Accreditation Program, Inc.
Accredited Entities	Monaged core plons, including HMOs; just released accreditotion stondards for managed behovioral healthcare organizations.	Hospitols, home care organizations, long term care facilities, psychiatric facilities, ambulatory care organizations, health core networks.	Utilizotion review progroms; managed care organizations (especially PPOs) including HMOs, PHOs, and integroted delivery networks. With ocquisition of AAPI, also ombulatory care facilities.
Number of accredited organizations	Approximately 250 HMOs.	More than 5,000 hospitals, more than 3,600 other health core orgonizations, 7 health care networks.	150 UR programs, 10-12 managed care orgonizotions, approximately 520 ambulotory care facilities.
Cotegories of standords	• Quality Improvement • Physician Credentials • Member's Rights & Responsibilities • Preventive Heolth • Utilization Management • Medical Records	• Improving Performance • Management of Human Resources • Rights, Responsibilities & Ethics • Health Promotian & Diseose Prevention • Continuum of Core • Monagement of Informotion • Education & Communication • Leadership	• Quality Management • Provider Credentialing • Member Protection & Participation • Network Porticipotion & Management • Utilizotion Monagement • Confidentiolity of Patient Informotion • Marketing & Sales
Quality Measurement Systems	Heolth Employers' Doto Information Set (HEDIS) Version 3.0 now in droft. HEDIS contains, Measures 1) that track how well heolth plons do ot helping sick people get better; 2) indicators to assess how effectively plons address the nation's most pressing health problems, such as cancer, heart disease, smoking and diabetes; and 3) a survey to gouge how consumers view the care they receive. Includes 75 meosures of both process and outcome, with another 30 measures included as o "Testing Set." Measures include such things as Smoking cessation advice; Flu shots for high-risk adults; Immunization status; Availability of primary core providers; Member disenrollment; Cesarean section and VBAC-rate; Weeks of pregnoncy ot time of enrollment.	The Indicotor Measurement System (IMSystem), is o notional performance measurement system designed to gouge ond compare the octual performance of health core organizations, stimulate improved care, and generate reports on performonce to meet the needs of patients, purchosers, and regulators of health care. About 200 health care organizations across the country ore participating. Clinical performance is measured in the following areas: C-section rates; Monitoring of trauma patients; Low birth weight; Use of cancer staging; Cancer mortality; Surgical infections; Perioperative complicotions; Diabetic patients' self-odministration; Timeliness of trauma care of insulin. Risk adjusted; comparative data.	None specific to URAC.
Information Disclosure	NCQA began 7/94 regular and full disclosure of health plons' accreditation status to the public. Begon 6/96 releasing more detoiled information in Accreditotion Summory Reports. NCQA has created o nationol database, Quality Composs, that will furnish detailed, comparative information on the quality of managed core plans. It integrates summory NCQA accreditotion information and HEDIS doto. A "first-of-its-kind" electronic submission tool wos provided to oll health plons free of charge to ossist in information collection.	JCAHO releases written performance reports on occredited orgonizations upon request.	Unknown.

other service delivery components to submit to review as well.[12]

URAC was chartered in 1990 in response to provider and managed care industry concerns about the impact of utilization review on providers and the proliferation of guidelines being used to evaluate the process. The organization selected a broad-based board of directors that includes representatives from the provider, managed care, regulatory, business and consumer communities.

By late 1995, URAC had accredited 155 utilization review programs, many of which operate in conjunction with HMOs. It recently acquired American Accreditation Program, Inc. (AAPI), which since 1989 accredited approximately 130 entities—primarily PPOs, plus some exclusive provider organizations and utilization review organizations. This acquisition dovetails with URAC's expansion into accrediting networks. Its newly adopted network standards were being beta-tested at the end of 1995 and apply to PPOs, HMOs, physician-hospital organizations, independent practice associations and integrated delivery networks.[13]

Refer to Table on Comparison of Major Accreditation Bodies for more information on how the major accrediting bodies compare.

New Focus on Physician-Specific Accreditation

Even the AMA is getting into the accreditation game. According to *Medical Staff Briefing*, the organization plans to launch "an ambitious program to evaluate and rate physician performance."[14] The objective of the new evaluation of credentialing and personal qualifications of physicians is to encourage physicians to achieve accreditation. "Our role is to up the ante, to provide an objective to strive for and improve (physician) performance," said William Jessee, MD, the AMA's vice president of managed care. "This will eliminate some of the 'noise' in the physician profiling environment, which makes it difficult for physicians to know how they're doing" in different performance categories, Jessee says.

The program will involve AMA-authorized teams who will evaluate physicians in the following areas: physician credentialing, personal qualifications, office site visits, clinical performance, and patient care results.

Increasing Importance of Accreditation and Quality

The popular literature is full of articles on how to select a health plan, suggesting that accreditation is something consumers should expect, though most are careful not to proclaim accreditation the only critical indicator of quality. Accreditors other than NCQA rarely get a mention, but NCQA's accreditation process and report cards are frequently discussed at length. Per the *Harvard Health Letter*,[15] measuring the outcomes of care—and thus its quality—is not a simple task. Many HMOs have come up with their own methods, but inconsistencies among them make it difficult for consumers to make meaningful comparisons. This is changing, however, as the NCQA refines it system for assessing, measuring, and reporting on the outcomes of care provided by HMOs.

In a recent cover article in *U.S. News & World Report* rating HMOs, it was noted that a large number of their top-rated HMOs are accredited.[16] According to *Consumer Reports*, it's worthwhile to find out whether a health plan has been accredited by the NCQA, "as long as you remember that accreditation is not a primary or an absolute standard."[17]

Black Enterprise encourages readers to find out if the health plans being offered have been reviewed and accredited by the NCQA, noting that "although it's no guarantee of how you'll be treated, at least you'll know how your plan stacks up on the major concerns."[18]

Although measuring the performance and quality of managed care plans or requiring them to be accredited remains primarily a "big company thing," an increasing number of companies are putting in place accreditation requirements. According to a survey of 368 U.S. companies released in early 1996 by the Washington Business Group on Health,[19] 59% of employers with 10,000 or more workers use HEDIS to assess health plan quality. In contrast, only 25% of companies with 1,000 to 9,999 workers and 6% of those with fewer than 1,000 do so. Fifty-seven percent of larger companies look at accreditation, and a growing number are requiring it.

What Is the Physician's Perspective?

The increasing focus on accreditation and quality reflects increasing demands by purchasers of health care services that health plans be held accountable not only for the cost of the services they provide but also for the quality of services. How does this "accountability trend" affect physicians? According to the American Medical Association in 1993, 75% of all practicing physicians were involved in a managed care arrangement of one form or another, a figure likely to have increased significantly in the past three years. Thus, it is the rare physician who is not affected by managed care.[20]

To prepare for an environment that is increas-

The popular literature is full of articles on how to select a health plan, suggesting that accreditation is something consumers should expect.

Physicians must understand the pitfalls of this auditing/measurement process and be able to counteract possible problems when measurement is done poorly.

ingly weighted toward managed care, physicians have to make themselves attractive to the managed care organization (MCO). The latter's success is linked directly to its ability to control costs, improve quality, and provide prompt and convenient access to services. Physicians who demonstrate the ability to provide high quality, efficient, and cost-effective care will be viewed as the best candidates for an MCO.[21]

Today's customer-conscious physician must concentrate on measures of quality and continue to strive for improvement while remaining cognizant of cost. Outcomes measurement eventually will be part of all reimbursement models, and public knowledge and use of these measures will become a major component of purchaser and patient decision making. Physicians must gear up to measure and become accountable for their activity. They must understand the pitfalls of this auditing/measurement process and be able to counteract possible problems when measurement is done poorly by an MCO, hospital, or independent consulting group.[22]

As purchasers plan to increase demands on health plans, the plans in turn will impose pressures on physicians. For example, physicians with several managed care contracts may be required to comply with the accreditation requirements of all the plans with which they contract, which could prove to be a great administrative burden. Further, they may need to provide medical record data within a specified, standardized format to help plans satisfy clinical performance measures.[23]

More performance information will be requested, and more will be publicly available. A recent *Wall Street Journal* article[24] reported that NCQA's latest set of standards call for HMOs to disclose more information about their care of patients with illnesses ranging from breast cancer to heart attacks.

While the NCQA can't force health plans to report patient-care data, some big employers have begun asking HMOs to do so—if they want to be on the roster of health plans being offered to employees. As a result, nearly all of the 30 largest HMOs in the U.S. gather and publicize at least some data of this type. These health plans also have begun putting pressure on individual doctors to take steps that will improve the HMO's overall showing in an NCQA "report card."[25]

In addition, employers and health plans are starting to demand that hospitals and physicians measure patient satisfaction.[26] Ultimately, many want surveys to be standardized and made public. In some markets, variations in price and geographic coverage have disappeared, creating demand for new ways to distinguish providers. It has also become apparent that satisfaction with health plans is tied to satisfaction with providers; both must be measured. "I think there is the beginning of a recognition that part of the reason people change (health) plans is they're not happy with the provider networks," said David Furse, president of NCG Research of Nashville, Tenn. NCG measures satisfaction rates for 200 hospital clients, up from 140 a year ago. Blue Cross of California is stepping up efforts to survey contracted providers. In the past year, Blue Cross took the unusual steps of requiring hospitals to measure patient satisfaction. It also increased fourfold the patient surveys it conducts on its 150 medical groups and independent practice associations under contract.

Among the mechanisms health plans use for physician accountability are credentialing and profiling.[27] Credentialing, the screening process whereby physician licensure, certification, education, training, and experience are verified and assessed, and periodic recredentialing of physicians by health plans has become increasingly common. Credentialing requirements by accrediting organizations are driving this expansion of screening.

Profiling usually involves the comparison of physician performance with established "norms" in clinical and administrative areas. This activity has also become more common, with 89% of surveyed HMOs using profiling information in 1995.[28]

Credentialing and profiling cause an increased administrative burden for physicians because of the additional paperwork associated with data collection and on-site inspection.

What can physicians do? A recent article in *Cardiology* suggests the following strategies:

- **Increase understanding of the accountability system**: Physicians should increase their understanding of the ways in which their performance will be assessed, the type of information they will be asked to provide, and the best manner for presenting those data.
- **Collection of data**: An informed, proactive approach toward data collection will benefit patient care and the physician practice. A group practice can collect such data as patient lengths of stay, complication rates, and mortality rates, and compare its results to state and national averages.
- **Become involved in performance assessment**: Physician participation is crucial for short- and long-term performance assessment to realize its full potential as a means of improving patient care. If physicians lack such involvement, not only may patient care be compromised, but physicians would

risk being evaluated by those without the training or experience to properly assess clinical skills.[29]

Conclusion

How can you learn more and get involved? Stay abreast of accreditation and quality measurement activities in the health plans in which you participate, and anticipate the demands that may be made of you. When the opportunity arises, become involved in leadership forums for local managed care organizations. Take advantage of managed care and quality measurement educational opportunities offered by hospitals, professional associations, and other organizations.

It is a rare physician who can afford to ignore what is occurring in this arena. Physicians can substantially increase the benefits for patients, payors, and providers (cubic win) by their proactive involvement with the process. J

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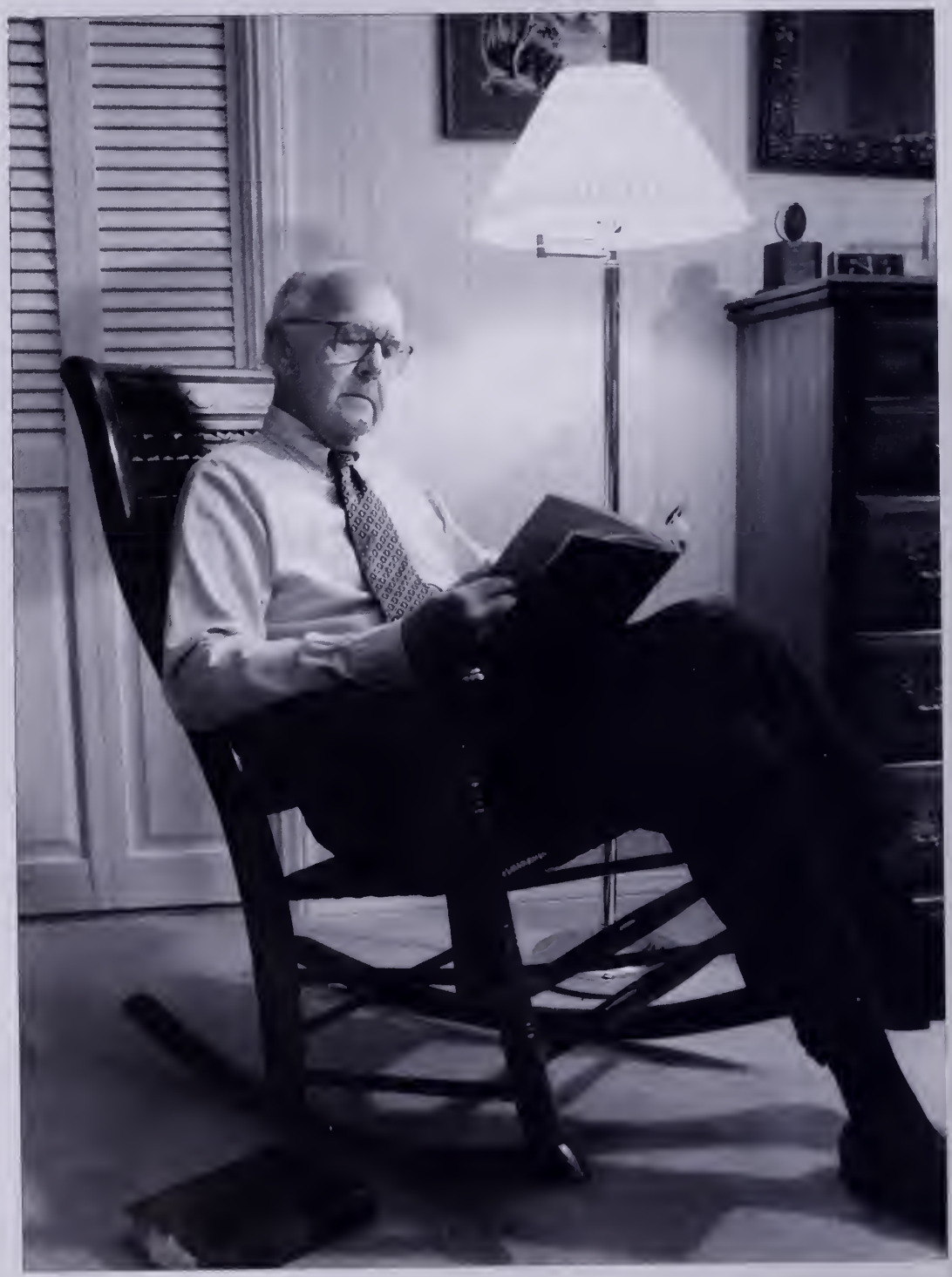
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In addition, employers and health plans are starting to demand that hospitals and physicians measure patient satisfaction.

LEARNING CURVES

LEADERS IN MEDICINE: EDWARD R. MUNNELL, MD



BY RICHARD GREEN
PHOTOGRAPHY BY
ROBERT TAYLOR

In August1995, Governor Frank Keating selected Munnell to fill a vacancy on the state Human Services Commission. The original appointment has evolved into practically a whole new career.

As a surgeon, Ed Munnell seemed to fit the stereotype to a T. He was a perfectionist, occasionally brilliant, compulsive, temperamental. Two generations of nurses and surgical residents had felt his bite; many of them, upon seeing him appear on the floor, doubtless exhibited the fight or flight response.

But even if he wasn't popular because they found him intimidating or inflexible or (choose your own word), they had to admit that his record as a surgeon was superb and that he wasn't half-bad as a teacher. Later in life, it wasn't necessary to wring such admissions from most of them; instead of *admitting* something positive or nice about the man, some *credited* him and thanked him for the constructive role he had played in their careers.

What many people did not know about Munnell (but may have suspected) was that coexisting with all the strong traits that contributed to making him a demanding thoracic surgeon was a deep-seated insecurity. This gnawing doubt was formed from his experiences during the Depression and a childhood marked by chronic illness and loneliness. In his practice, he kept a tight lid on this insecurity. But in social settings it might emerge, as one of Munnell's friends described, as an enduring need to be praised, to be accepted.

A perfectionistic drive combined with insecurity assured that Munnell would spend as much time as possible in the O.R.—where he was in control. To some, this cast him in an unflattering light as a rather predictable and narrow-minded individual. In some respects, the appraisal was deserved. Despite his education, intelligence, and interest in many nonmedical aspects of American culture, he went through life stereotyping others in precisely the same way he, himself, was stereotyped. For example, he thought the chronic poor were lazy and/or stupid. Bureaucrats were working the system for their own benefit. Many psychiatric patients, being weak and self-indulgent, just needed to get control of themselves and their lives.

Of course, no stereotypes are literally true. They are shorthand for shallow observations often made by others. He understood this intellectually, though he didn't see himself as a practitioner. Or if he did, he didn't see much evidence that his beliefs were wrong.

But as he slipped into old age, when attitudes and behaviors often become more rigid, Munnell was offered an opportunity to help in an arena that was alien to him. Despite the risks attached, particularly to an insecure person, he accepted the assignment, in part, because his desire to help people in need had always superseded other concerns. To his surprise and delight, the original appointment has evolved into practically a whole new career.

In August 1995, Governor Frank Keating selected him to fill a vacancy on the state Human Services Commission. Although Munnell has processed a forest of new information, he has managed not to lose sight of the trees. For he has brought some fresh insights to his new colleagues and transformed one idea into a crusade. In the process, he has been on a journey of self-discovery and growth. Some of what he has learned will turn up here on these pages.

* * *

By the late thirties, when Ed Munnell was in high school in Jackson, Michigan, he knew he wanted to be a physician. Although he probably didn't articulate it then, he believes two factors influenced his career choice. First, he noticed that no physicians were out of work; in fact they had plenty to do and most of the time they got paid something. Achieving a sense of security was extremely important to the generation of children growing up during the Great Depression. Although his father never lost his job, there were plenty of unemployed people, and he still has vivid memories of taking a sack of groceries, at his mother's direction, to the neighbors. Furthermore, Ed's grandfather, who had retired in 1929, had to return to work because his retirement money had been wiped out by the stock market crash.

Second, he believed that doctors usually





Ed did his pre-med work at the University of Michigan in Ann Arbor, where he was a member of the all-male marching band.

made their patients feel better. He knew doctors made him feel better, and as a child who suffered frequently with prolonged and severe bronchial infections during Michigan's long winters, Ed was in a position to know. Since antibiotics were still years away, what really helped Ed was his trust in the strong but kindly doctor.

These two factors not only contributed to Munnell's career choice, they also produced a synergy of insecurity. Ed was always big for his age, and there was an expectation that he would be good in sports. But even mild physical activity could trigger uncontrollable coughing spells that left him weak, exhausted, and ill sometimes for weeks on end. During the second grade, Ed missed an entire semester of school. At such times, his parents must have wondered if their only child would survive.

"I remember their anxiety," Munnell says. "Sometimes, the doctor would make two house calls a day. He gave me cough syrups and once exposed me to UV light. I remember wearing goggles to protect my eyes."

Frequent and prolonged absences from elementary and junior high and his precarious health left Ed with no real friends. He spent most of his time away from school playing by himself or reading. That suited his parents, whose goal was to get their son enrolled in college. He would be the first on either side of the family to go to college.

Ed was born July 30, 1921 to Joseph Munnell and the former Mary Bishop. After World War I, Joseph, who had served in France, landed an entry-level job with the state of Michigan prison industries and through dedication and perseverance during the years of Ed's childhood worked up the ranks to superintendent. Prison industries in those days included not only the ubiquitous license tags, but also factories for metal stamping (for all state highway signs), furniture, shoes, textiles, and monuments. "My father didn't stop working when the bell rang," Munnell says. "And he would often bring work home and work on weekends. He was dedicated."

Like father, like son? "I think I was primarily influenced by him, but I certainly wasn't conscious then of the fact that if you worked hard you'd get ahead—although I had some part-time jobs during school, selling magazines and selling hardware at Sears for 25¢ an hour.

Ed's mother, Mary, was very protective of her only child. "She wouldn't let me play with other children in the summer because of polio epidemics. My mother doted on me, you could say. She dressed me well and properly, but she—in fact both of my parents—were quite reserved. I knew they loved me but they didn't demonstrate it."

They did demonstrate their concern for unfortunate people. "We were by no means well off. But my parents shared what we had with less fortunate neighbors and my father helped veterans through the American Legion."

In high school, Ed studied two to three hours a day. He wanted to excel at something and since it couldn't be athletics (where the real status was), it would be academics. He was valedictorian of a class of 175 and was voted "most likely to succeed" by his class of 1940. His girlfriend, Phyllis Swick, was voted "most sincere."

Ed did his premed work at the University of Michigan. His parents had always sacrificed so that their son could attend college. No scholarships were available, even to the valedictorian of the well-respected Jackson High School. Joseph Munnell went to a local industrialist and obtained a loan to supplement his savings.

Ed and Phyllis were married on April 1, 1944, and then "honeymooned" in Chicago during the rest of Ed's 72-hour pass. On their wedding night, they saw a new musical that had just opened: "Oklahoma."

At Ann Arbor, Ed excelled academically and enjoyed all of his course work except poetry (he just didn't get it). But the high point of his three years in Ann Arbor (if not his life, he describes it so exuberantly) was being in the all-male marching band. "The motto, 'As one man,' says it all. The spirit of togetherness was tremendous."

Such camaraderie was derived from the band director, an exceptional teacher and motivator. "When we weren't performing, everything was relaxed," recalls Munnell, who played trumpet. "But our performances had to be precise. The director got our best and that is why, in part, it was such a thrill to march out of the tunnel onto the Michigan playing field. We accompanied the team on two away games a year; the most memorable trip was to Boston where we played Harvard. General Motors paid our expenses. On the way home, we stopped in New York and stayed at the Roosevelt Hotel. To thank the local Buick dealers, who were paying our New York expenses, we entertained them at lunch."

* * *

Munnell was one of 65 freshman accepted by the University of Chicago Medical School to begin class work in April 1943. If he had waited for the fall semester at Michigan, he might have been drafted. (Although he still was susceptible to bronchitis, the attacks were less frequent and less severe and he probably would not have received a medical deferment.) Although he had intended to go to Michigan and his mother had pushed Johns Hopkins (he lacked the prerequisite course work in Greek), Munnell feels that his medical education could not have been better.

He was attracted to the "intense scholarly environment" of the classrooms which were appropriately housed in the John D. Rockefeller–inspired Gothic buildings, all pointed arches, flying buttresses, and gargoyles. Since medical students were in the Army or Navy, finances were not a major problem, and Ed and Phyllis were able to get married. They tied the knot in Jackson on April 1, 1944, and then "honeymooned" in Chicago during the rest of Ed's 72-hour pass. On their wedding night, they saw a new musical that had just come to town: "Oklahoma."



Ed studied long hard hours every day and night except Sunday and aced practically everything. Not that he needed it, but there was extra motivation: on the basis of grades and scholarly activities, the military decided who did a residency and who went active as a general medical officer. Even after V-E day in 1945, no one thought the war was about to end.

During one of his clinical rotations, Munnell became so impressed with the physical diagnosis skills of pulmonologist Bill Tucker that he decided to train in internal medicine. In later rotations, however, Munnell realized that his rapport with the patients wasn't very good. "I was so preoccupied with staying in control, doing what was right, and not messing up that I wasn't listening to my patients. Communication was definitely a problem. I was willing, but not always able."

Munnell knew almost immediately that surgery suited him perfectly. "I liked the technical and mechanical side, the precision and the fact that you can do something for a patient right away."



Ed Munnell poses for a snapshot while based at Ft. Sam Houston in San Antonio during World War II.

Toward the end of his senior year, he took the surgery rotation, and although he did nothing except observe and hold retractors and pass instruments, he knew almost immediately that surgery suited him perfectly. "I liked the technical and mechanical side, the precision and the fact that you can do something for a patient right away. I had already applied and been accepted for a medical internship at Henry Ford Hospital in Detroit. Suddenly, I was frantic to switch to a surgical internship, and thank goodness I was allowed to make the change."

He received his MD from the University of Chicago in early 1946 and later that year the Munnells' first child was born, a boy named Mark.

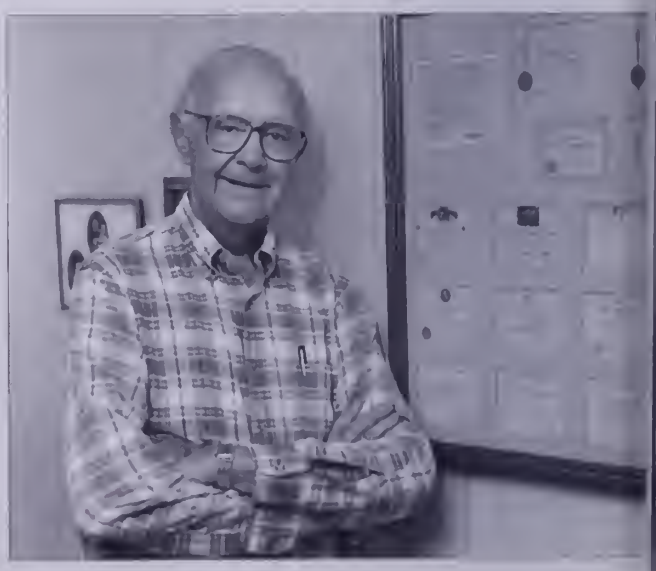
More than half of Munnell's internship was in surgical rotations, but again, he mainly watched and occasionally did menial tasks. He says he was not impatient to show what he could do. For one thing, he didn't know if he possessed good manual dexterity and creativity. For another, "in the pyramid training program of that time, you increased and improved your skills as you moved up through the residency. I simply had to wait my turn."

He knew his gratification was going to be considerably delayed because he owed two years to Uncle Sam. But with a little maneuvering on his part and some timely luck, Munnell's hitch in the peacetime Army turned out to be very beneficial. Munnell had spent some time working in a research lab in medical school and pointedly mentioned this experience during an interview with some colonels who were placing new medical officers. Voila! Munnell was sent to Fort Knox, Kentucky, to the cardiovascular physiology section run by a most demanding civilian named Dr. Donald Gragg.

Munnell spent the first six months developing a colony of hypertensive rats by attaching a vice-like clamp to the renal artery. Then, he worked on a reliable way to measure a rat's blood pressure. This involved lots of measuring and monitoring, using new electronic recording devices that were so sensitive they could not be used when tanks were shooting at each other three miles away. The recording devices also were used to measure coronary blood flow in lab animals. A perfectionist, Dr. Gragg demanded that every task be performed flawlessly. Munnell recalls that Gragg once made him re-write a paper eight times. When Munnell's two years of active service were up, he knew what constituted good science and how to use the new recording devices.

The two Army years were the only normal ones the Munnell family would ever have. He worked an 8 to 5 day and no weekends. The only difficulty was that young Mark had the same problem as his dad, frequent bouts of bronchitis. "Every time his temperature hit 104, he convulsed," Munnell says. "A pediatrician treated Mark's enlarged tonsils by irradiating them right out of existence. That took care of the fever, since he had no tonsils to get infected, but for years afterward Mark had to have periodic thyroid uptake studies to ensure that he was not developing cancer of the thyroid."

Munnell was discharged as a captain in June 1949. That same year, the couple's sec-



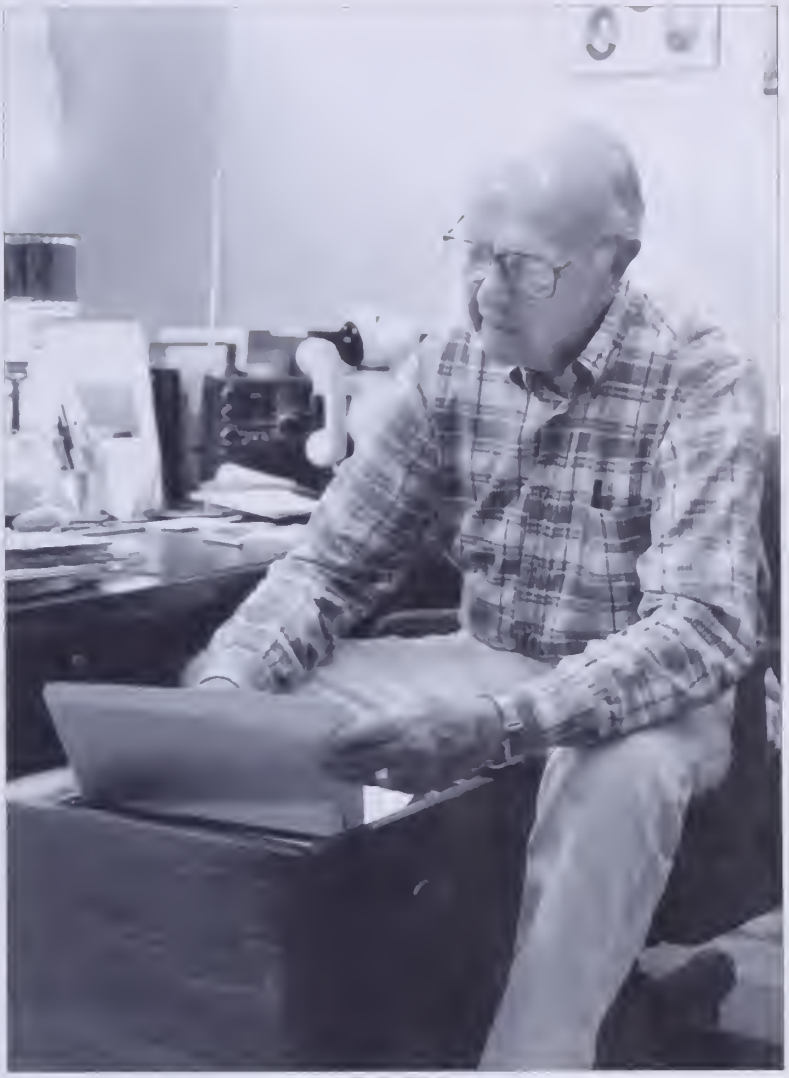
ond and final child was born, a girl they named Marcia.

* * *

Although Munnell called the pyramid style of residency training "cut throat," he was not its victim—like the residents who didn't survive the annual winnowing—he was its beneficiary. In 1952, he was made chief surgical resident at the Henry Ford Hospital. Having his own service, he was free to develop his own style, to make his own way. He had been exposed to many surgeons, but the two whom he remembers best today were markedly different. The chief of surgery (who shall be nameless) was a demagogic leader who demanded that everything be done perfectly—that is, his way. Not surprisingly, the atmosphere on the service, Munnell says, "was as tight as Dick's hatband. After I got to be chief resident (Munnell actually pronounces it *res-dent*), some of the residents pleaded with me not to assign them to this man. I was not unsympathetic."

The other surgeon was Conrad Lam, head of thoracic surgery, whose personality was nearly the antithesis of the chief's. Although an excellent surgeon who was also demanding, Lam was a role model to anyone, like Munnell, in need of improving physician-patient communication. During his year as chief, Munnell says he worked hard to improve his communication skills and tried hard to demonstrate the empathy he felt to his patients and their families.

Munnell felt an affinity toward Lam from the beginning. After spending six months in Lam's animal lab doing physiological studies during the first year of his residency, Munnell started thinking about specializing in thoracic surgery. Fortunately, by the time he was ready in 1953, Lam had developed a residency training program and Ed Munnell was his first resident. Surgical residents at Henry Ford by and large were brought along very slowly and Munnell didn't get on the operator's side of the table until his last year, 1954.

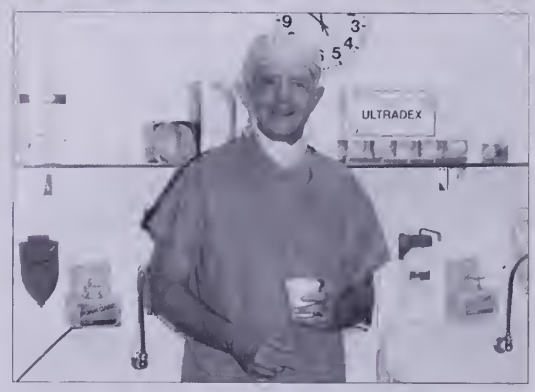


Ever busy, Ed Munnell logs many hours in his home office.

In these pre–heart-bypass years, heart surgery was largely confined to children, correcting simple congenital anomalies or rheumatic fever-induced scarring of heart valves. But what made the surgeries truly daunting was that the manipulations were made by feeling inside the *beating* heart. If the defective heart valve couldn't be opened by a surgeon's finger, Lam and (toward the end of his residency) Munnell would attach a blade to his forefinger and gingerly, very gingerly, cut away the obstructing tissue.

Lam and Munnell did "dozens" of such operations during the early 1950s. One to correct mitral stenosis was featured in a two-page photo spread in a 1952 issue of the *Detroit Free Press*. One of the photos shows Lam and Munnell posing with an oscillograph, an electronic recording device that Munnell had first used on lab animals when he was in the Army. The





Above, Munnell shows an early heart-lung machine that he and his colleagues at the Oklahoma City Clinic used.

Right, Munnell, just prior to his retirement, takes a break from the O.R.

oscillograph measured blood pressures in the heart and enabled surgeons to know immediately if their blind manipulations inside the heart had been successful.

In addition to heart and other thoracic surgeries, Lam and Munnell designed and carried out experimental protocols in Lam's animal lab. Through repeated trial and error, they worked on transplanted heart valves until one homograft worked for eight weeks. They believed they were getting close to perfecting the transplantation procedure, but the biggest obstacle to its clinical application was the absence of a heart-lung machine. "Of course we knew these pumps were under investigation, but in the early 1950s, there wasn't much light, if any, at the end of the tunnel," Munnell says.

In the medical teaching tradition of see one, do one, Munnell left Detroit in December 1954 to set up a cardiovascular surgery section at the Veterans Administration Hospital in Oteen, North Carolina. During his 18 months as chief, he did a lot of pioneering surgeries but many of these had equivocal or poor outcomes. Most involved surgeries designed to increase blood flow to the heart to deal with disabling angina. Theoretically, this re-routing of vessels looked promising, but none of the operations worked any better than nitroglycerine. Pericarditis presented another unique problem. "With pericarditis, the sac would crimp down on the heart like a vise," Munnell says. "You'd have to peel this away or cut it off with scissors (while the heart continued to beat), being careful not to tear or puncture the heart. It was nerve wracking to say the least. Sometimes I would accidentally puncture the heart. But one of the most important things I ever learned from Conrad Lam was not to panic. You've got blood shooting out of a nicked artery or heart puncture, put your finger on it, apply pressure and that gives you time to think."

* * *

When Ed and Phyllis visited Oklahoma City that first time in February 1956, they expected to see a tableau of Indians and John Steinbeck characters and windscapes. They were not disappointed to be wrong. Ed was checking out the Oklahoma City Clinic and Phyllis was checking out everything else. They liked everything they saw. They had expected to stay two or three days, but remained five. The clinic needed a thoracic surgeon who was willing to do some general surgery. Ed was happy to do that while he built up his thoracic practice because he thought the clinic was an ideal practice setting. Consisting of about 20 physicians, the clinic was acknowledged to be the premier multi-practice specialty clinic in the state. Several of the physicians were leaders in their field, among them: Robert Lawson, Ben Nicholson, John Records, Jack Hough, Bill Rucks, Charles Bielstein, and Austin Bell. Moreover, the physicians not only owned the clinic, they also owned Wesley Hospital.

Through affiliations with the University of Oklahoma medical school, there were also teaching and research programs available at University Hospital. During a cordial meeting, Munnell's prospective competition, thoracic

When Ed and Phyllis visited Oklahoma City that first time in February 1956, they expected to see a tableau of Indians and Steinbeck characters. They were not disappointed to be wrong.

surgeon Allen Greer told him that the clinic would be a wonderful place to work. Even the weather seemed great and the Munnells wanted to be in a warmer, dryer climate for the sake of their son Mark's bronchitis. During their five-day stay that February, the weather had been unseasonably warm, and they left with an unrealistically rosy view of Oklahoma's winters. Munnell took a thousand-dollar-a-year pay cut and moved his family to Oklahoma City in June 1956.

By 1958, Munnell had convinced his clinic partners to fund research leading to the ability to perform open-heart surgeries. "I don't know how I did it because at the time the heart surgery patient population was dwindling. Antibiotics were managing rheumatic fever, which was responsible for many cases of damaged heart valves. Heart bypass surgery was not in the picture at all. I worked up a budget of expenses for the research and could not assure the clinic's board that we could even recoup our initial investment."

Still, such an effort, if successful, would revolutionize heart surgery, and that is why research teams all over the nation, including Allen Greer's team at Mercy Hospital, were trying to perfect a pump that would safely supply oxygenated blood to the patient's body during lengthy open-heart operations. Munnell led a team of from 8 to 10, who worked every Wednesday on the second floor of a converted house near Wesley Hospital. One day their colleague Bill Rucks paid a visit and, taking in all the activity amid the exotic-looking equipment in the cramped quarters, said it resembled "an Arabian marketplace."

The team's young cardiologist, Charles Cathey, remembers those nine months of research as probably the most fun he had during his career. "I was a bit in awe of Ed's knowledge, skills, and research publications. But on the other hand I really wanted to work with him because I was somewhat cocky myself."

The team knew they were competing with



Thanksgiving 1995 at the Munnell household.



Munnell's most prized award is the Will Ross Medal honoring him as the American Lung Association's outstanding volunteer in 1991. Attending the presentation was his wife, Phyllis, and children, Marcia and Mark.

Dr. Greer's group to perform the state's first successful open-heart surgery. Munnell says it was "silly to be racing," but the two hospitals fueled the competition to an extent. In any event, Cathey says the competition was friendly. "Al (Greer) was such a wonderful guy. When a piece of their equipment broke down, we loaned them a replacement."

Munnell's team practiced using the pump on lab animals, solving problems, and working out bugs that could doom the open-heart surgery on patients. Several successive animals survived and the team's confidence grew. But as Cathey recalls, "We thought we needed ten. What we didn't know then is that animals are much harder to do than humans."

Meanwhile, word came that Greer's team had succeeded. Munnell says, "I was a bit disappointed, but not for long. Ben Nicholson had a 6-year-old patient whose ventricular-septal defect was causing pulmonary hypertension. Without open-heart surgery, she would eventually die. Ben told us it was time to 'fish or cut bait.'"

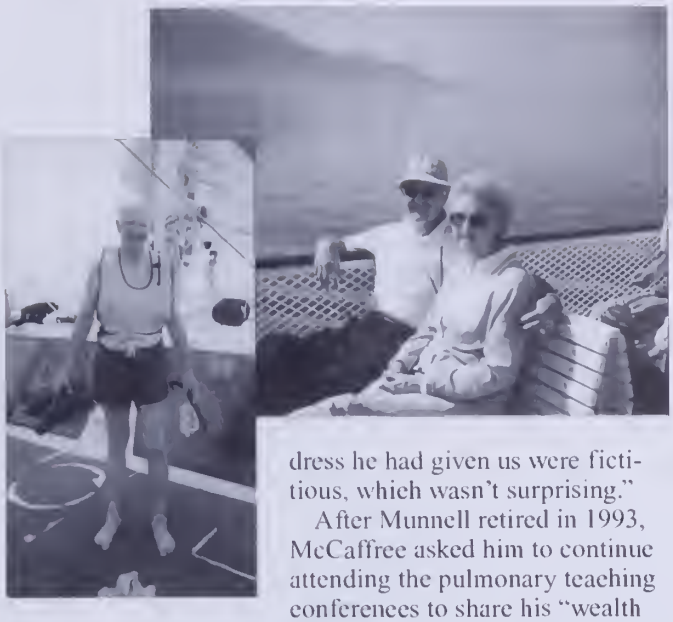
Munnell was "quite worried." He had never done this type of surgery before, and the risks of stroke, infection, and bleeding seemed to loom larger than ever. Both the little girl and the surgical team survived, and on the day she was discharged from the hospital a newspaper article about the surgery recounted the story. In keeping with the ethics of the time, Cathey was identified and quoted as Dr. A and Munnell was Dr. B.

In 1963, Munnell did his first heart pacemaker operation and in 1964 performed his first heart bypass surgery. In the early years of that surgery, the process was so cumbersome, time-consuming, and fraught with crises that it would often tie up the O.R. for an entire day. "We could only do two by-pass procedures a week," Munnell says.

Cathey ran the pump during the surgeries; he remembers it as "a miserable job. The time on the pump was sheer terror, thinking we'd not get enough venous return or an air bubble might create a crisis for the patient and us. In perhaps 25% of our early cases we did have some sort of crisis. Although the odds of mak-



Ed Munnell, who takes copius notes and still prefers to compose important correspondence by hand, has written a book detailing the history of the Oklahoma City Clinic.



The Munnells enjoy traveling together. At top, Ed and Phyllis enjoy a cruise on Lake Geneva. Below, Ed tries his hand at snorkeling off Key West.

ing it were 50-50 and patients and families were informed of that statistic, every loss was a big disappointment."

Munnell often felt elation with success and anger (from frustration) with failure. He was better at masking his elation than the anger, which was manifested as "inappropriate lashing out" at people. "There were plenty of times when Ed would give someone on the surgical team, me, for instance, that go-to-hell look or adopt an icy tone and I'd want to kill him," Cathey recalls. "Once, early on, he and I went to Henry Ford Hospital to observe its open-heart program, and I remember thinking on the plane, I'm dreading this because they probably all know and hate him and they'll hate me, too. But the nurses, especially, were falling all over themselves greeting him and asking about his family. It was clear they liked and respected him."

A similar sentiment was mentioned by Dr. Rainey Williams, chief of OU's surgery department and a former chief of staff at University Hospital. "I don't think Ed ever won any popularity contests among the residents because he insisted things be done his way. And he had a temper. But after they completed their training, many of them developed an expanded perspective. They have told me he was a good teacher and, in retrospect, how beneficial he had been to their careers."

Dr. Robert McCaffree, chief of staff at Oklahoma City's VA Medical Center, says he developed admiration for Munnell's professionalism and caring after one incident he observed as a medicine resident in the late sixties. "Ed had operated on a man for a 'trapped lung' and afterwards the patient wasn't doing well. We didn't know if he was going to make it, so Ed spent an extraordinary amount of time caring for and checking on this patient, who was basically a guy off the street. He helped him to pull through and one day the patient just got up and left, unnoticed. The name and address he had given us were fictitious, which wasn't surprising."

After Munnell retired in 1993, McCaffree asked him to continue attending the pulmonary teaching conferences to share his "wealth of knowledge" and the spirit of his commitment to patients. Munnell participates every Friday he is in town.

* * *

The trend toward medical specialization that began after World War II was having a serious impact on morale at the Oklahoma City Clinic a generation later. Since the clinic's beginning in 1919, all income had been pooled and equal amounts were distributed to the physicians. By the late 1950s that arrangement was no longer satisfactory to all the physicians; in 1959, ear surgeon Jack Hough ended 13 years with the clinic by resigning in protest over the income distribution issue. In 1967, the trend toward a new means of income distribution could no longer be denied. Recruiting and retaining physicians had become a major problem.

In naming Munnell president of the clinic, the trustees were asking him to provide the leadership to get the process underway. It would be difficult because many of the physicians had become polarized and board meetings often displayed more heat than light. In speaking for the status quo, internist Bill Rucks told Munnell that money would change the focus of practice and lower quality. Furthermore, Rucks was unwilling to admit that a surgeon was a better doctor than he was based on pay. Munnell told Rucks that wasn't the issue. "We have to have everybody to make this thing go, but the world is changing and we



Ed Munnell listens attentively to the discussion at a recent meeting of the Human Services Commission.

have to change with it or we won't develop."

Although Munnell was personally satisfied with his income—"I was driven all right, but not to make money"—he knew he had been elected to preside over a transition. Studies showed that dramatic changes were needed. We made the changes in income distribution gradually over three years. As a result, I got it from both sides: from those who wanted no changes and those who were upset because we were going too slow. I was really torn. The change had to be made, but here were friends who wouldn't speak to me. For the first time, I was waking up at 3 a.m. worrying."

Munnell completed his three-year tenure in 1970. Although the transition had been successfully started, which reversed the clinic's declining ability to compete, Munnell was "burned out. I didn't enjoy the experience overall, but I did benefit from it. I developed skills in diplomacy I never thought possible."

During his 18 months at the VA Hospital in Oteen, North Carolina, Munnell had developed expertise in lung surgery. In the years ahead, he enjoyed doing lung surgeries and found them more challenging in many ways than heart surgery. It was a natural fit then when Munnell began volunteer activities for the Oklahoma Lung Association. He was also an ex-smoker who was backsliding as recently as 1971. During a trip to the Soviet Union, he found the regimentation so stressful that he began bumming smokes off his son, Mark.

By the mid-seventies, he and John Rogers, executive director of the state chapter, had developed a proposed 10-year Oklahoma Lung Research Program, which was intended to raise research funds for local seed grants and fellowships in lung disease and research. It was the first such program in the U.S. and under their leadership, the program raised $3.5 million. In 1976, Munnell helped establish and was the first chair of the Oklahoma Coalition on Smoking and Health. This group was intended to wake up the public to the fact that smoking is the most preventable cause of death in the U.S.

Every voluntary health agency needs a guy like Ed," Rogers says. "His skills and background suited the agency's purpose. He always fulfilled any obligation he undertook. He never attended a meeting unprepared. He was never timid about expressing himself and pushing his point of view, but if he didn't prevail, he didn't sulk."

Naturally, the American Lung Association solicited Munnell's expertise and he served on its board for 10 years. "During my 18 years as executive director, nobody in Oklahoma put in the time and effort that Ed did," says Rogers. "He received the annual Breath of Life Award in 1976 for his outstanding medical contributions to lung disease, but he could have won that award many other years as well."

While Munnell received several other state lung association awards, his most prized is the Will Ross Medal honoring him in 1991 as the American Lung Associations's outstanding volunteer. Munnell is the only Oklahoman to receive the award. "The ceremony in Anaheim

"Every voluntary health agency needs a guy like Ed. He always fulfilled any obligation he undertook. He never attended a meeting unprepared. He was never timid about expressing himself..." –John Rogers, Exec. Dir., Oklahoma Lung Assn.

was attended by some 6,000 people," says Rogers, who added that about 300 people had been nominated for the award in 1991.

While the national award was Munnell's crowning achievement in that phase of his life, another was just getting underway. He retired from the clinic in 1987 at age 66, but continued to do lung surgeries at the VA Medical Center into 1993. Meanwhile he was writing a book on the history of the Oklahoma City Clinic and in 1989 began attending monthly meetings of the Oklahoma Council on Aging. He had been appointed a consultant to the council by the Oklahoma State Medical Association.

After attending only a few meetings, Munnell was impressed with the members who were all volunteers and committed to improving conditions for Oklahoma's aging citizens. Representatives of the Department of Human Services also attended the meetings and Munnell was particularly impressed with the "dedication and savvy of the staff of the division of Aging Services. He quickly realized that the media only captured "polarizing events that made news" and that this perpetuated an image of DHS and its clients that had little to do with reality.

When he learned of a vacancy on the DHS Commission, Munnell called Roy Keen, the director of Aging Services, to ask if it would be "idiotic" to try to get on the commission, "since I'm not a politician." Keen encouraged him to apply and promised his support.

Since his appointment in August 1995, Munnell has plowed several new furrows. He persuaded DHS Director George Miller and the commissioners to support increased salaries for DHS health professionals to help the agency recruit and retain them. And after seeing how the Ombudsman Program monitors nursing home care effectively with some 268 trained volunteers around the state, Munnell wants to expand the whole notion of volunteerism at DHS.

Although it has taken him a few months, the other commissioners appear to be converted. "We want to apply a similar volunteer program to monitoring child care centers. Practically every DHS division could use volunteers to lighten workloads without sacrificing services. Volunteers can provide transportation for senior citizens. When I was in practice, I never gave a thought to how an elderly person got to my office. But you know," he says, gesturing toward the DHS folders on his desk, "I'm on a new learning curve." J

Richard Green, an Oklahoma City writer, has been doing Leaders in Medicine biographies for the JOURNAL since 1985.

Robert Taylor is a professional photographer based in Oklahoma City.





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Your Voice in Washington

Last month, OSMA President David L. Harper, MD, urged members to become an active political force, both in Oklahoma and in Washington, to speak out and make their views known, and to stress concern for quality patient care and not just the financial issues involved.

Below are the names, addresses, and phone numbers you will need to make your voice heard in Washington. This information is also available through a link on the OSMA Internet home page, <www.osmaonline.org>.

Note: When writing letters to Senators or Congressmen, send them to the Washington office; when calling, call the local office. Either way, always ask for a written response from them, telling you their views!

EXAMPLES FOR MAIL TO WASHINGTON, DC:

U.S. Senate:
The Honorable John Doe *(Dear Senator Doe:)*
The United States Senate
000 Hart Senate Office Building
Washington, DC 00000-000

U.S. House:
The Honorable John Doe *(Dear Congressman Doe:)*
U.S. House of Representatives
000 Cannon House Office Building
Washington, DC 00000-0000

OKLAHOMA'S ELECTED OFFICIALS IN WASHINGTON:

★ **Senator Don Nickles**
U.S. Senate, 133 Hart Sen. Ofc. Bldg., Washington, DC 20510-3602, Ph: 202-224-5754, Fax: 202-228-6008
or
409 S. Boston, #3310, Tulsa 74103, Ph: 918-581-7651
1820 Liberty Twr., N. Broadway, OKC 73102, Ph: 405-231-4941
1916 Lake Rd., Ponca City 74601, Ph: 405-767-1270
Amer. Natl. Bank, 601 SW D Ave., #206, Lawton 73501, Ph: 405-357-9878

(continued)

Oklahoma Capitol Contacts

1997 Legislative Session

"It is imperative that we not become complacent and that we continue to make our views known..."

—OSMA President David L. Harper, MD

Physicians wanting to voice their opinions on medically related issues in the Oklahoma Legislature this session may wish to make a note of the following committee members who will be dealing with most of that legislation:

Senate Human Resources Committee—Sen. Bernest Cain, D-OKC, is chair; Sen. Penny Williams, D-Tulsa, is vice-chair. Other committee members are Senators Ben Brown, D-OKC; Keith Leftwich, D-OKC; Angela Monson, D-OKC; Ben Robinson, D-Muskogee; Gene Stipe, D-McAlester; Trish Weedn, D-Purcell; Grover Campbell, R-Owasso; Bill Gustafson, R-El Reno; and Howard Hendrick, R-Bethany.

House Public Health Committee— Rep. Fred Stanley, D-Madill, is chair. Rep. Al Lindley, D-OKC, is vice-chair. Other members are Representatives Betty Boyd, D-Tulsa; Kevin Cox, D-OKC; Bob Ed Culver, D-Tahlequah; Abe Deutschendorf, D-Lawton; Joe Eddins, D-Vinita; Charles Gray, D-OKC; Ron Kirby, D-Lawton; Bill Paulk, D-OKC; Russ Roach, D-Tulsa; Barbara Staggs, D-Muskogee; Opio Toure, D-OKC; Carolyn Coleman, R-Moore; Bill Graves, R-OKC; Joan Greenwood, R-Moore; Hopper Smith, R-Tulsa; John Sullivan, R-Tulsa; and Dan Webb, R-OKC.

House Community and Family Responsibilities Committee—Rep. Laura Boyd, D-Norman, is chair. Rep. Ray Vaughn, R-Edmond, is vice-chair. Other members are Representatives Debbie Blackburn, D-OKC; Jim Hamilton, D-Poteau; Barbara Staggs, D-Muskogee; Dwayne Steidley, D-Claremore; Robert Weaver, D-Shawnee; Bill Case, R-OKC; Joan Greenwood, R-Moore; and Doug Miller, R-Norman.

(over)

Your Voice in Washington *(continued)*

★ **Senator Jim Inhofe**
U.S. Senate, 453 Russell Sen. Ofc. Bldg., Washington, DC 20510-3601, Ph: 202-224-4721, Fax: 202-228-0380
or
1924 S. Utica, #530, Tulsa 74104, Ph: 918-748-5111
100 S. Main, McAlester 74502, Ph: 918-426-0933
204 N. Robinson, #2701, OKC 73102, Ph: 405-231-4381
302 N. Independence, Enid 73701, Ph: 405-234-5105

OSMA— OSMA's lobbyist at the state capitol is Lynne Stewart White. OSMA Associate Director Vickie White Rankin is working with state legislation.

Call or write these individuals as follows:

The Honorable John Doe *(Dear Congressman Doe:)*
Oklahoma House of Representatives
State Capitol Building
Oklahoma City, OK 73105
House Switchboard: 405-521-2711
Toll-Free: 800-522-8502
House Fax: 405-557-7351

The Honorable John Doe *(Dear Senator Doe:)*
Oklahoma State Senate
State Capitol Building
Oklahoma City, OK 73105
Senate Switchboard: 405-524-0126
Senate Fax: 405-521-5507

Lynne Stewart White *(Dear Ms. White:)*
Oklahoma State Medical Association
601 West I-44 Service Road
Oklahoma City, OK 73118
Phone: 405-843-9571
Toll-Free: 800-522-9452
Fax: 405-842-1834

Vickie White Rankin *(Dear Ms. Rankin:)*
Oklahoma State Medical Association
601 West I-44 Service Road
Oklahoma City, OK 73118
Phone: 405-843-9571
Toll-Free: 800-522-9452
Fax: 405-842-1834

For detailed, up-to-the-minute information on the status of specific bills and the appropriate legislators to contact, watch for the *OSMA News* and special mailings of legislative alerts and calls for action.

★ **Congressman Steve Largent,** District 1
U.S. House of Representatives, 410 Cannon House Ofc. Bldg., Washington, DC 20515-3601, Ph: 202-225-2211, Fax: 202-225-9187
or
2424 E. 21st St., #510, Tulsa 74114, Ph: 918-749-0014

★ **Congressman Tom Coburn,** District 2
U.S. House of Representatives, 429 Cannon House Ofc. Bldg., Washington, DC 20515-3602, Ph: 202-225-2701 Fax: 202-225-3038
or
215 State St., #815, Muskogee 74401, Ph: 918-687-2533
120 S. Missouri St., Rm. 105, Claremore 74017, Ph: 918-341-9336
34 "A" St. NE, Rm. 202, Miami 74354, Ph: 918-542-5337

★ **Congressman Wes Watkins,** District 3
U.S. House of Representatives, 2312 Rayburn Ofc. Bldg., Washington, DC 20515, Ph: 202-225-4565
or
1511 Cimarron Plaza, Stillwater 74075, Ph: 405-743-1400
118 Carl Albert Federal Bldg., McAlester 74501, Ph: 918-423-5951
P.O. Box 1607, Ada 74820, Ph: 405-436-1980

★ **Congressman J.C. Watts,** District 4
1713 Longworth House Ofc. Bldg., Washington, DC 20515, Ph: 202-225-6165
or
2420 Springer Dr., #120, Norman 73069, Ph: 405-329-6500
601 SW D Ave., #205, Lawton 73501, Ph: 405-357-2131

★ **Congressman Ernest James Istook, Jr.,** District 5
119 Cannon House Ofc. Bldg., Washington, DC 20515, Ph: 202-225-2132
or
5400 N. Grand Blvd., #505, OKC 73112, Ph: 405-942-3636
5th & Grand, Ponca City 74601, Ph: 405-762-6778
First Court Pl., #205, Bartlesville 74003, Ph: 918-336-5546

★ **Congressman Frank Lucas,** District 6
107 Cannon House Ofc. Bldg., Washington, DC 20515, Ph: 202-225-5565
or
215 Dean McGee Ave, #109, OKC 73102, Ph: 405-231-5511
703-A Frisco St., Clinton 73601, Ph: 405-323-6232
P.O. Box 3612, Federal Bldg. Rm. 229, 115 W. Broadway, Enid 73701, Ph: 405-233-9224
2728 Williams Ave., #F, Woodward 73801, Ph: 405-256-5752

Clip and save this page for quick reference!

Here's Our Agenda

It's simple. It's straightforward. And it represents the future of medicine. The American Medical Association presented to the Republican and Democratic leadership this agenda for the upcoming 105th Congress. Your AMA membership strengthens our voice in support of physicians and their patients. . . and will enhance our efforts to turn these goals into reality.

- **Patient Protections** Above all, preserve the ability of physicians to act as advocates for their individual patients. Do not allow insurers to "gag" physicians or withhold medically necessary treatments from their patients.

- **Medicare Reform** Make the Medicare program solvent. Expand patient choice of plans. Allow future growth rates that cover patients needs. Retain special protection for the vulnerable and elderly.

- **Medical Education and Research** Continue to support medical education and research so we can find cures for killers such as AIDS and cancer.

- **Public Health Problems** Expand prevention and treatment programs to combat AIDS, drug abuse, smoking and violence. These problems cost billions of dollars and millions of lives.

- **Liability Reform** Enact meaningful liability reform to ensure fair compensation to patients with legitimate claims while eliminating excessive malpractice awards that lead to defensive medicine.

Join or renew your membership in the AMA today — call 800 AMA-3211

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Official Call

The House of Delegates of the Oklahoma State Medical Association will conduct its 91st Annual Meeting at the Southern Hills Marriott Tulsa, Oklahoma April 25-27, 1997

Opening Session: 8:30 a.m., Friday, April 25
Closing Session: 9 a.m., Sunday, April 27

All members, delegates, alternate delegates, and county society officers are encouraged and urged to attend. Business to be brought before the House of Delegates must be submitted by March 25, 1997.

All items of business will be debated in open reference committee hearings on Friday, April 25.

Any member of the association may submit business for consideration by the House of Delegates. For help in preparing information for submission, please contact

OSMA Headquarters
601 West I-44 Service Road
Oklahoma City, OK 73118
405-843-9571 or 1-800-522-9452

Mary Anne McCaffree, MD
Speaker of the House

Elkins receives Dean's Award

Oklahoma City surgeon Ronald C. Elkins, MD, received the Dean's Award for Distinguished Medical Service at the 13th Annual Evening of Excellence award dinner January 30 in Oklahoma City. The black-tie gala is sponsored by the University of Oklahoma College of Medicine Alumni Association and is a joint project of the state's business and medical communities. It provides a forum for honoring leaders from these two sectors of the community. This year's business honoree was James R. Tolbert III, a civic leader credited with revitalizing Oklahoma City's Bricktown district. He received the Dean's Award for Distinguished Community Service.

The goal of the $150-per-plate dinner is to raise research funds for OU's Health Sciences Center campus. To date the banquets have raised more than $1 million for medical research.

Dr. Elkins' efforts have been directed toward improving surgical care, particularly cardiovascular surgery, for Oklahoma's children and young adults. He was, for example, instrumental in the development of the life-saving pulmonary autograft valve replacement procedure. Dr. Elkins is a 1962 graduate of the OU College of Medicine and completed his internship and residency at Johns Hopkins. Later he completed a clinical fellowship at the National Heart Institute in Bethesda, Md., and a research fellowship at Johns Hopkins. Dr. Elkins currently is professor and vice chairman of surgery and chief of thoracic surgery at the OU medical school and also chief of cardiac services at University and Children's hospitals and the Veterans Affairs Medical Center in Oklahoma City. JT

Call for Resolutions

All resolutions to be presented to the Oklahoma State Medical Association House of Delegates Annual Meeting must be received in the OSMA executive offices not later than thirty (30) days prior to the meeting. This year's meeting will be April 25-27, 1997, at the Southern Hills Marriott in Tulsa. County medical societies or individuals wishing to submit resolutions should mail them to OSMA, 601 West I-44 Service Road, Oklahoma City, OK 73118. If you need assistance in drafting such resolutions, please contact the executive offices.

Resolutions must be submitted on or before March 25, 1997

Tentative Meeting Schedule
91st Annual Meeting of OSMA House of Delegates

Thursday, April 24, 1997

10:00 am ... OSMA/Alliance Registration
10:30 am ... OSMA Executive Comm. Meeting
Noon ... OSMA Executive Comm./Brd Luncheon
1:30 pm ... OSMA Board of Trustees Meeting
2:00 pm ... PLICO Allied Health Personnel Loss Prevention Seminar
5:30 pm ... Women in Medicine Reception

Friday, April 25, 1997

7:00 am ... OSMA/Alliance Registration
7:30 am ... OSMA Org. Med. Staff Section Breakfast
7:30 am ... Tulsa Co. Med. Soc. Caucus & Breakfast
7:30 am ... Okla. Co. Med. Soc. Caucus & Breakfast
7:30 am ... Rural Co. Med. Soc. Caucus & Breakfast
7:30 am ... Credentialing for HOD Begins
8:00 am ... Exhibits & AMA-ERF Silent Auct. open
8:30 am ... OSMA House of Delegates Opening Session
9:00 am ... Alliance Pre-Convention Board Meeting
11:45 am ... OSMA/Alliance/Exhibitor Luncheon Speaker: First Lady Cathy Keating
Noon ... Medical Alumni Assn. Hospitality Suite
1:30 pm ... OSMA Candidates' Forum
2:30 pm ... OSMA Reference Committees
6:00 pm ... Okla. Surgical Association Party
6:00 pm ... Opening Night "Gala" (OU Alumni, OSMA, Alliance & Exhibitors)
6:00 pm ... Reception
7:00 pm ... Medical Alumni Assn., University of Oklahoma Annual Dinner
8:30 pm ... Evening Cordials & Cotillion (Buddy Billen Band)
9:00 pm ... Medical Alumni Assn., University of Oklahoma Reunions (Classes of 1952, '57, '62, '67, '72, '77, '82, '87 & '92)

Saturday, April 26, 1997

7:00 am ... OSMA/Alliance Registration
7:00 am ... Okla. Surgical Assn. Council Breakfast
7:00 am ... OSMA Past, County Soc., & Specialty Soc. Presidents' Breakfast
7:30 am ... Alliance State Past Presidents' Breakfast
7:30 am ... Alliance Co. Soc. Presidents and Co. Soc. Presidents-Elect Breakfast
7:30 am ... OSMA Council on Rural Health Breakfast
8:00 am ... Exhibits & AMA-ERF Silent Auct. open
8:00 am ... CME Session (OU College of Medicine) Cat. I
8:00 am ... CME Session (Physicians Accessing the Internet) Cat. II
8:30 am ... Medical Alumni Assn. Hospitality Suite
9:00 am ... Alliance House of Delegates
9:30 am ... Okla. Soc. of Anesthesiologists Lectures
10:00 am ... Medical Alumni Association, University of Oklahoma, Board Meeting
11:00 am ... Physical Medicine and Rehabilitation Soc. Luncheon & Meeting
11:00 am ... Okla. State Orthopedic Soc. Luncheon & Meeting
Noon ... OSMA/Alliance/Exhibitor Luncheon
Noon ... Okla. Surgical Assn. Luncheon & Meeting
12:45 pm ... AMA-ERF Silent Auction winners and other prize winners announced
1:00 pm ... CME Session (Physicians Accessing the Internet) Cat. II
1:00 pm ... Okla. Soc. of Anesthesiologists Luncheon
2:00 pm ... Exhibits close
2:00 pm ... Okla. Soc. of Anesthesiologists Meeting
2:00 pm ... OMPAC Meeting
2:00 pm ... PLICO Loss Prevention Seminar Placenta Study
2:30 pm ... Alliance Post-Convention Board Meeting
3:00 pm ... OSMA Coun. on Governmental Activities
3:00 pm ... PLICO Loss Prevention Seminar Professional Liability in Managed Care
6:00 pm ... OSMA/OSMAA Presidents' Reception
7:00 pm ... OSMA/OSMAA Presidents' Inaugural Banquet *(Black Tie Optional)*

Sunday, April 27, 1997

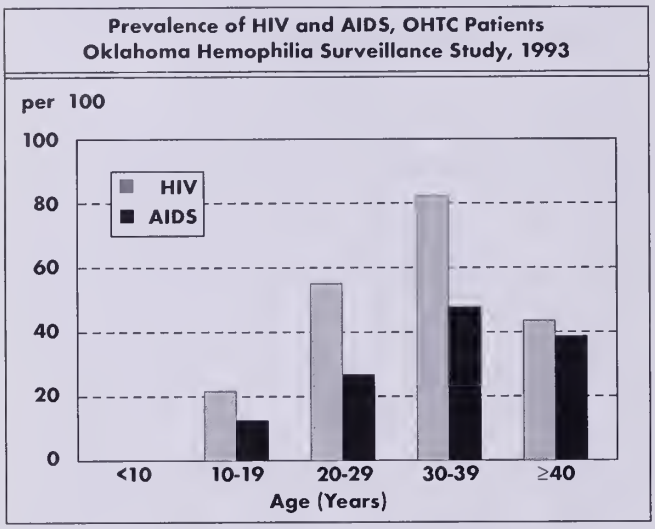
6:30 am ... Credentialing for HOD Begins
7:00 am ... Voting Room Open
7:00 am ... OSMA Registration
7:30 am ... Tulsa Co. Med. Soc. Caucus & Breakfast
7:30 am ... Okla. Co. Med. Soc. Caucus & Breakfast
7:30 am ... Rural Co. Med. Soc. Caucus & Breakfast
9:00 am ... OSMA House of Delegates Closing Session
Noon* ... New OSMA Officers, Trustees, and AMA Delegates Luncheon
1:30 pm* ... AMA Delegation Caucus
1:30 pm* ... PLICO Forum

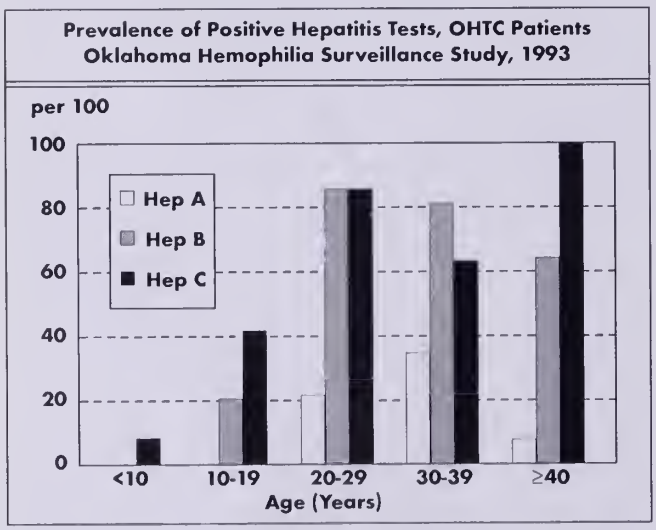
*Beginning time subject to the ending of the House of Delegates Closing Session.

Update:

Hemophilia Surveillance Project

The Oklahoma State Department of Health (OSDH), working in collaboration with the Centers for Disease Control and Prevention (CDC), the Oklahoma Hemophilia Treatment Center (OHTC), and the Department of Biostatistics and Epidemiology at the OU Health Sciences Center, established a surveillance system in 1993 to determine the prevalence of hemophilia in the Oklahoma population, and to study the long-term complications associated with this disorder. The ultimate goal of the project is to develop interventions that will minimize or prevent the physical and financial burdens associated with hemophilia. To assist in surveillance, and to protect confidentiality, hemophilia was declared a reportable disease by the Commissioner of Health. The project is entering its second three-year cycle and is currently funded through December 1999.





For the purposes of the surveillance project, a case of hemophilia is defined as a factor level less than 30% and a physician's diagnosis of hemophilia A or B. Using multiple methods of case identification, 230 confirmed cases of hemophilia (176 Factor VIII deficiencies [hemophilia A] and 54 Factor IX deficiencies [hemophilia B]) have been identified in Oklahoma for the period 1993 through 1995. Of all known cases in 1993, the OHTC was the primary source of care for 66% of them. Among persons treated outside the OHTC (non-OHTC cases) the primary source of care was a private physician (53%). Preliminary data for 1993 show that 50% of the OHTC cases and 27% of non-OHTC cases have severe hemophilia (factor levels <1%). Percentages for moderate hemophilia (factor levels of 1-5%) are 16% and 19%, and for mild hemophilia (factor levels of 6-30%) are 34% and 39% for OHTC and non-OHTC cases respectively.

At this time, data on complications among the non-OHTC cases is limited. Therefore, the frequency of complications has been assessed only in OHTC patients. Twenty-nine percent of the OHTC patients tested were HIV positive and 17% had AIDS. There were no cases of HIV or AIDS among patients less than 10 years of age. Invasive joint procedures have been performed on 30% to 40% of the OHTC patients in the 20-and-older age group. These procedures include arthrograms, and arthroplasty with or without synovectomy. For those cases over 40 years of age, more than 30% were non-ambulatory for at least some period of time in 1993, and 22% of those in this age group required an ambulatory aid (i.e., cane, crutches, walker, etc.). In 1993, 50% of the OHTC cases were positive for hepatitis C, 38% were positive for hepatitis B, and 8% were positive for hepatitis A. Among cases over 20 years of age, more than 75% were positive for hepatitis B and 82% for hepatitis C. There was a very low prevalence of being positive for hepatitis in those under 10 years of age, (5% for hepatitis C and 0% for hepatitis B). Screening and heat treatment of the blood supply, as well as use of monoclonal processing, have reduced the risk of acquiring blood-born hepatitis. This has increased confidence of both physicians and families in the use of primary prophylactic measures.

It is important that the hemophilia community be informed that this surveillance effort is taking place, and thus, those working with the hemophilia community are being asked to inform their parents, clients, friends, and family members with hemophilia about this project. If anyone is interested in obtaining additional information, they are encouraged to contact State Project Coordinator Sharon Warner at (405) 271-3970 or (405) 271-3084 (collect calls accepted) or OSDH Project Administrator Shari Kinney at (405) 271-4476.

State HIV/AIDS cases reach 2622

The cumulative total of reported AIDS (acquired immunodeficiency syndrome) cases in Oklahoma, from the first diagnosis in 1983, had reached 2,622 by the end of September 1996. Forty-one percent of this total, or 1,070 individuals, still survive.

Because infection with HIV (human immunodeficiency virus) became a reportable condition in 1988, an additional 1,731 persons are known to be living with the infection, but have not met the diagnosis of AIDS. Currently 58 of 77 counties in Oklahoma have reported more than two HIV/AIDS cases.

In assessing the characteristics and trends of the epidemic for prevention efforts, the Oklahoma State Department of Health relies more heavily on the incidence of HIV infection. This relates to the fact that AIDS diagnosis often follows the viral infection by several years, while HIV infection is more encompassing in scope. This underlines the vital nature of accurate and timely reporting of HIV infection. In the period January through June 1996, 43% of all reports were initiated by private physicians, hospitals, and outpatient facilities.

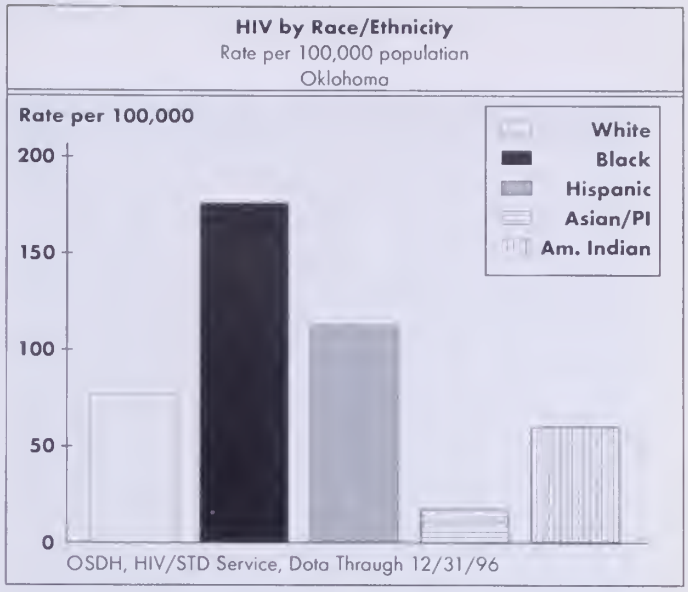
Numerical totals, often reflective of sheer population density, tend to provide a rather simplistic look at the infection. By also reviewing infection rates, a much clearer presentation of those populations most adversely affected with HIV is realized. Incidence rates in males (98 per 100,000) is six times greater than females (16 per 100,000). The rate of infection in African Americans (172 per 100,000) is approximately four times greater than, and the Hispanic rate (81 per 100,000) almost twice the rate for whites (45 per 100,000). The rates for American Indians (41 per 100,000) is very close to the rate in whites, and Asian Pacific Islanders (15 per 100,000) is consistently lower (Table 1).

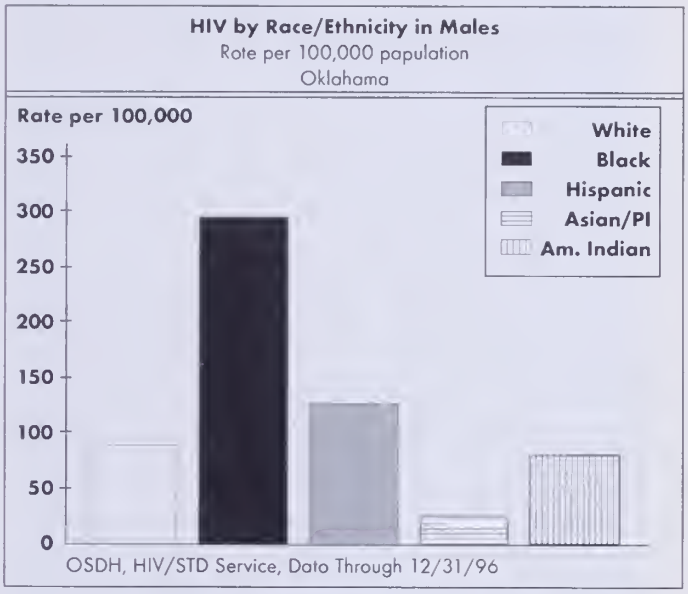
When race/ethnicity is correlated with gender, as represented in the accompanying graphs (Tables 2 and 3), relative shifts in infection patterns are discernible. Care should be taken in comparing one graph to another as the scales are adjusted to permit a clear representation in light of corresponding rate differences.

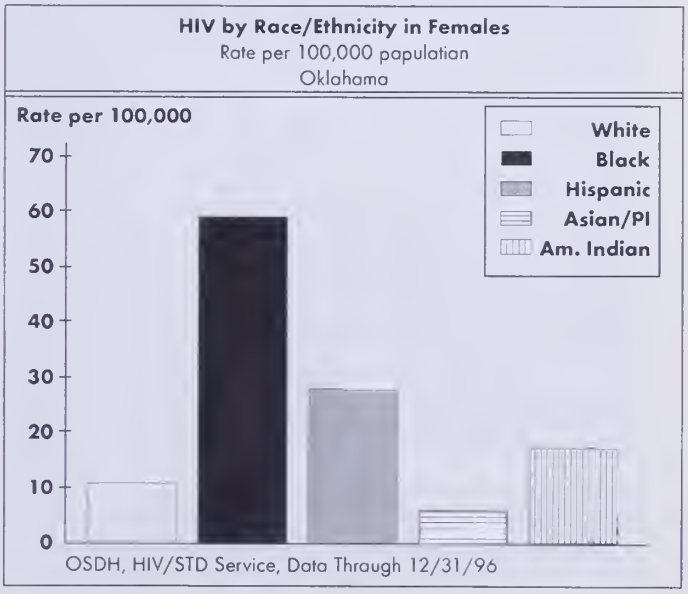
Specific behaviors are certainly indicative of increased risk for HIV infection. Prevention efforts are directed toward education, understanding, and modification of those behaviors placing individuals at increased risk. However, cultural and ethnic values must be taken into account in order for prevention activities to be effective and acceptable in a given population.

Clearly in Oklahoma, the African American population, both male and female, are most significantly affected by HIV infection, although no racial or ethnic group is free from risk. Therefore physicians should be cognizant of potential HIV infection in their own client bases and offer testing as appropriate. Maternity patients remain a priority for HIV testing regardless of known exposure or increased risk of infection.

Additional information, including specific data requests, may be obtained through the HIV/STD Service of the Oklahoma State Department of Health at (405) 271-4636. J







CAPSULES

■ **Resolutions for this year's Annual Meeting are beginning** to arrive at OSMA headquarters and often constitute the most interesting portion of the meeting's business proceedings. The first two resolutions received this year came from the Cleveland/McClain County Medical Society.

One addresses capitation payment to physicians. The resolution concludes: "Resolved, That 'any form' of payment from one physician to a second physician whether by direct payment or indirectly from a capitation or 'withhold' pool that results in the referring physician collecting or keeping a higher fee in exchange for the second physician accepting less than his or her normal fee be deemed fee splitting and as such be considered unethical."

The other resolution deals with practicing medicine without a license. It concludes: "Resolved, That the Oklahoma State Medical Association reaffirms the concept that decision-making and implementation functions involved with the diagnosis or treatment of patients be carried out only by licensed physicians, and be it further

"Resolved, That the Oklahoma State Medical Association encourage the State of Oklahoma to prosecute any unlicensed individual or entity who attempts to practice medicine as defined by Oklahoma statutes."

■ **Michael Winzenread, MD, Oklahoma City, was featured** on the January 31 edition of ABC's "Good Morning America." He was a sleep apnea patient who had been diagnosed and treated successfully by Dr. William C. Orr, director of the Lynn Institute for Healthcare Research sleep medicine program at Integris Baptist Medical Center in Oklahoma City, and Norman K. Imes, MD, Oklahoma City, a specialist in pulmonary disease.

In the final segment of a five-part series entitled "The Power of Sleep," Dr. Orr discussed lifestyle changes maximizing one's ability sleep as well as medical treatments available for physiologically based sleep disorders such as sleep apnea, a respiratory problem associated with snoring.

■ **In an effort to improve security at OSMA headquarters,** groups meeting in the building before or after OSMA's regular business hours (9-5, Monday through Friday) are now required to have an OSMA staff member on the premises during such meetings. The staff member will be responsible for securing the building and setting the alarm. A fee of $10 per hour will be charged to non-OSMA groups, who will have to arrange for a staff member to be present. The new policy became effective February 1, and all groups that have used the building in the past have been notified.

■ **Authors preparing manuscripts for submission** to the JOURNAL are reminded that in addition to 4 print copies of the manuscript, a copy of the paper on computer disk is required. Most popular word processing formats are acceptable, as are ASCII and ANSI text.

■ **All OSMA members are invited to attend the 91st Annual** Meeting of the OSMA House of Delegates in Tulsa April 25-27. The theme of this year's meeting is "New Directions in Medicine." Non-delegates, while they cannot vote, are welcome to sit in on meetings of the House and its reference committees as delegates conduct the business of the association and set its course for the next year. A schedule packed with business, professional, and social events will provide something for everyone. Watch your mail and next month's JOURNAL for complete details, schedules, and ticket order forms. This year's meeting will be at the Southern Hills Marriott Hotel in Tulsa. Mark your calendar now and plan to attend.

■ **The lawsuit involving the Oklahoma Board of Medical** Licensure and Supervision (OBMLS) and the Oklahoma Board of Examiners of Optometry has been delayed until April 14, 1997. In January, Judge Eugene Matthews, who will hear the case, informed attorneys George Short and Cynthia Sparling, who represent OBMLS, that he faces more extensive back surgery than originally anticipated, forcing the postponement. Earlier the judge and attorneys had agreed to an early February trial date, with March 31 as a backup date.

LETTERS

More on MRI of lightning injury

To the Editor: I found the article in the March 1996 issue [OSMA JOURNAL] by Milton, O'Dell, and Warner regarding "MRI of Lightning Injury" to be interesting and informative. I would like to discuss two matters regarding their paper that I believe your readers might find of relevance.

1. The authors state: "To our knowledge, the early MRI findings of lightning injury have not been previously reported." In fact, there are two reports in the literature of MRI findings early in cases of lightning injuries, including two of our articles. [1,2]

2. The authors discuss the mechanisms of injury by lightning to the central nervous system. They mention vascular injury, thermal injury, "direct electrolyte effect of current passing through tissue," and mechanical effects. Another possible mechanism of the damaging effects of electrical current on mammalian tissue might be due to electroporation (pore enlargement). This phenomenon of membrane damage has been studied by Lee and his associates.[3]

—Michael Cherington, MD
Lightning Data Center
St. Anthony Hospital
4231 W. 16th Avenue
Denver, CO 80204

References

1. Cherington M, Yarnell P, Hallmark D. MRI in lightning encephalopathy. *Neurol* 1993;43:1437-1438.
2. Cherington M, Yarnell P, Lammereste D. Lightning strikes. Nature of neurological damage in patients evaluated in hospital emergency departments. *Ann Emerg Med* 1992;21:575-578.
3. Lee RC, Aarsvold JN, Chen W, et al. Biophysical mechanisms of cell membrane damage in electrical shock. *Semin Neurol* 1995;15:367-374.

cc: Drs. Milton, O'Dell, and Warner

■ **The Oklahoma State Medical Association recently received notification that it will receive a partial grant from the AMA to be used to provide a hands-on Internet training course for physicians through the AMA's Physicians Accessing the Internet (PAI) program. The grant provides a substantial part of the funds required to bring Internet instructors, mobile units of computer, and materials for the four-hour course. Two workshops, accommodating 30 participants each, will be presented during the OSMA Annual Meeting on Saturday, April 26, and will provide 4 hours of Category 2 CME credit. Several OSMA physicians recently attended the PAI training session held during the AMA Interim Meeting in Atlanta and encourage all physicians to attend one of the sessions and attend learn more about the Internet.**

Information on the workshops will appear in the OSMA Annual Meeting information packet to be mailed in the latter part of February. J

Deaths

Bruce Hunter Brown, MD
1923 - 1996

Retired McAlester radiologist Bruce H. Brown, MD, died August 4, 1996. A Life Member of the OSMA, Dr. Brown was graduated from the University of Oklahoma School of Medicine in 1947. He completed an internship at St. Anthony Hospital and a general residency at Mercy Hospital, both in Oklahoma City. He then took a three-year residency in radiology at University Hospital, also in Oklahoma City. A native of McAlester, Dr. Brown returned there to establish his medical practice. During World War II, Dr. Brown served in the U.S. Army from 1943 to 1946.

Ronald Wallace Gilchrist, Jr., MD
1934 - 1997

Ronald W. Gilchrist, Jr., MD, 1960 graduate of the University of Oklahoma School of Medicine, died January 19, 1997. Dr. Gilchrist, an Oklahoma City dermatologist, was born in Clinton, Okla. After completing his postgraduate training, which included a three-year fellowship at the Mayo Graduate School of Medicine, he returned to his practice in Oklahoma City. He was a clinical associate professor of dermatology at the University of Oklahoma, and a member and past president of both the Oklahoma City and Oklahoma State Dermatologic societies. J

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Kerri Dianne Williams, MD January 9
Emanuel Nathan Lubin, MD January 11
Ted Samuel Edward Lewis, MD January 31
Elbert Henderson Shuller, MD January 26
Earl I. Mulmed, MD February 2
Ralph Richard Markland, MD February 10
William Jackson Dowling, MD February 13
Theodore Sherman Williams, MD February 22
John Walker Johnson, Jr., MD March 13
Joseph Jules Maril, MD March 16
Carl Archie Barclay, MD March 21
Thomas Dewey Howard, MD March 21
Hobart Curtis Sanders, MD March 22
Charles Eugene Green, MD March 29
Jane Self, MD March 30
Erma Ossip Johnson, MD April 3
Marlene Marie Normand, MD May 6
Henry Hubert Modrak, MD May 17
James Polk Luton, MD May 21
John Hartwell Dunn, MD May 27
Logan Albert Spann, MD June 7
Coye Willard McClure, MD June 19
James Jackson Gable, Jr., MD July 8
Thomas McNeil Story, MD July 9
Herschel Jerome Rubin, MD July 12
John Andrew Graham, MD July 20
Robert Douglas Anspaugh, MD July 21
Robert Moran Herlihy, MD July 24
Ralph Carrol Denny, MD July
William Allen Heflin, MD August 3
Bruce Hunter Brown, MD August 4
Arnold Gordon Nelson, MD August 26
Ollie Wayne Dehart, MD August 28
Leslie Arvin Arneson September 26
Bertram Edward Sear, MD October 4
Walter Wicker, Jr., MD October 11
Ellis Edwin Fair, MD October 21
William Nathan Oxley, MD October 22
Jesse Day Shipp, MD October 28
William Manning Moore, MD November 28
Charles Leonard Benson, MD December 8
William Norris Harsha, MD December 17
Ronald S. Barlow, MD December 21

1997

Edward J. Tomsovic, MD January 2
Ronald W. Gilchrist, Jr., MD January 19

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References are to be listed in the order of their appearance in the article, and in the style used in the JOURNAL and *JAMA* (author, title, publication, year, volume number, pages). Footnotes, bibliographies, illustrations, and legends should be on separate sheets.

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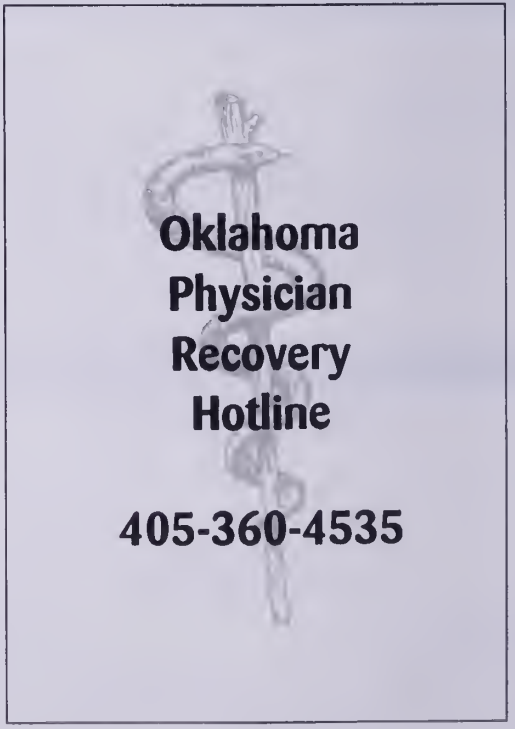
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On Becoming a Political Animal

The Oklahoma Legislative Session opened on February 3rd. Committees are already meeting in the House. I want to encourage all alliance members to sign up to participate in the Grassroots Contact Programs. You will be notified by the OSMA or by State Legislation Chair Sherry Strebel when it is necessary for you to contact the legislator in your district. You can help your legislator understand the impact a bill will have on the physician, patients, and people in Oklahoma. The OSMA has an ambitious and difficult agenda. Every contact that alliance members make on behalf of the OSMA increases the success of the program and the legislative agenda.

Vickie White Rankin, the OSMA staff legislation member, is willing to come to your county alliance meeting to inform you of what is happening in the House and Senate. If you are interested, please give her a call at the OSMA office.

I encourage you to join AMPAC-OMPAC this year. The OMPAC board is considering several levels of giving this year instead of the two levels currently in place. In 1996, the OMPAC board gave money to those candidates who supported medicine at least 80% of the time. The OSMA staff will continue to evaluate the legislators' support of medicine. You will receive a letter soon asking you to support AMPAC-OMPAC.

Some benefits of joining AMPAC are the campaign school, the candidates' school, and the National Political Conference. The AMPAC Campaign School is a bipartisan, intensive five-day school taught by the nation's leading political consultants. Students learn the basics of a political campaign—from making the candidate's announcement to developing the strategy and message; from targeting votes to conducting Get Out the Vote drives on election day. This seminar gives you the essential tools to be an effective campaign volunteer on behalf of organized medicine. The school is held once a year during the first quarter in Washington, D.C.

If you are thinking about running for a public office, the AMA has a program designed for members of the medical community considering a run for elective office. Learn from political experts how to make the decision to run, the secrets of effective fundraising, the role of the spouse and family, and how to become a better political speaker. The next Medicine's Candidate will be in November.

Mark your calendars for these 1997 programs:

February 10-23:	
AMPAC Campaign School	Washington, D.C.
February 12:	
Constituent Skills Workshop	Oregon Medical Assn. Salem, Ore.
April 25-26:	
Political Education Program	Med. Soc. of Virginia Wintergreen, Va.
November 14-16:	
Medicine's Candidate: A Prescription for Political Success	Washington, D.C.

If you have questions about these programs, please call the OSMA office.

Information for a portion of this article came from AMA brochures and *Grassroots Tools in a High Tech Era.*

THE LAST WORD

■ **OSMA Director of Operations Kathy Musson was named** acting executive director last month following the January 13 resignation of Executive Director Mike Sulzycki. Sulzycki had been a member of the OSMA staff since 1983. Before assuming the association's top post following the retirement of predecessor David Bickham, Sulzycki was OSMA Director of Communications. During his years in that position he became well known to both members and the media as a dedicated and articulate spokesperson for both the association and the profession.

At the instruction of the OSMA Board of Trustees, OSMA President David L. Harper, MD, Tulsa, has appointed a committee to coordinate a nationwide search for a new CEO. Members of the committee, who will participate in the search and make recommendations to the board, in addition to Dr. Harper, are Drs. David M. Selby, Enid, chair; Robert J. Weedn, Duncan; Richard E. Martin, Pryor; Frank Phelps and Boyd O. Whitlock, Tulsa; and Norman K. Imes, Roger E. Sheldon, Rebecca M. Tisdal, and Sara R. DePersio, Oklahoma City. Dr. Gordon Deckert, Oklahoma City, will serve as consultant at will.

■ **Drafted at the January 12 meeting of the OSMA Board** of Trustees was the following mission statement for the association: "To promote the best health for the people of Oklahoma in a professional, ethical, and compassionate manner by advocating for patients, representing physicians, and promoting the art and science of medicine."

Also drafted was a Five-Year Vision or list of goals: 1. Assume a more active and visible role in promoting and improving health and health education. 2. Increase physician membership and participation in OSMA. 3. Increase participation in legislative and regulatory processes. 4. Secure significant physician input in all managed care decisions. 5. Increase the unity and collegiality of our profession. 6. Improve and enhance organizational effectiveness and membership services. 7. Communicate more effectively and efficiently with OSMA membership, patients, and the people of Oklahoma.

■ **OSMA President David L. Harper, MD, at the request** of the OSMA Board of Trustees, has appointed an ad hoc committee for the Health Care Authority as it deals with SoonerCare. The decision to appoint a committee came in the wake of discussion at the January 12 board meeting, when members realized the need to address some of the problems facing Oklahoma physicians. Serving on the committee are Drs. Mary Anne McCaffree, MD, Oklahoma City, chair; Bruce L. Storms, Chickasha; Rebecca M. Tisdal, Oklahoma City; Glenn P. Dewberry, Oklahoma City; D. Wilkinson, Muskogee; and Jane M. Thomason, Ponca City.

■ **John Montgomery, OSMA's federal lobbyist, visited** Oklahoma City in late January to meet with and update OSMA Governmental Activities Chair Richard J. Boatsman, MD; OSMA state lobbyist Lynne White; and OSMA staff members Kathy Musson, Lyle Kelsey, and Vickie Rankin on the national legislative agenda this session.

One issue of particular concern to be discussed by Congress this session is Medicare reform. Montgomery and members of the Governmental Affairs Committee will be working with Oklahoma Senator Don Nickles on proposed changes which OSMA would like to see included in the reform package.

Those wishing a copy of the highlights from President Clinton's Medicare Reform package may request one from OSMA headquarters at 800-522-9452 or 405-843-9571.

■ **Volunteers are still needed for OSMA's Doctor of the** Day program at the state capitol. At press time, dates remained open during the months of April and May. Volunteers should bring their own prescription pads and need only provide a primary level of care. Each will be assisted by a Nurse of the Day. Doctors of the Day are introduced in both chambers of the Oklahoma Legislature by their respective legislators and will be updated on pending legislative issues of interest to OSMA. This will aid them in discussions with legislators about issues pertinent to medicine. Physicians wishing to serve as a Doctor of the Day should contact Janet Carr at the OSMA, 405-843-9571 or 800-522-9452.

■ **In a letter dated January 2, 1997, Oklahoma Osteo**pathic Association President Ronnie B. Martin, DO, informed the PLICO Board that OOA had withdrawn its endorsement of PLICO. He wrote: "The Board of Trustees of the Oklahoma Osteopathic Association met in special session December 30, 1996, and passed a motion to rescind the OOA's endorsement of Physicians Liability Insurance Company while continuing the association's (OOA) endorsement of CNA for professional liability insurance. The unexpected change resulted from information that was clearer in December than it was in the early Fall.

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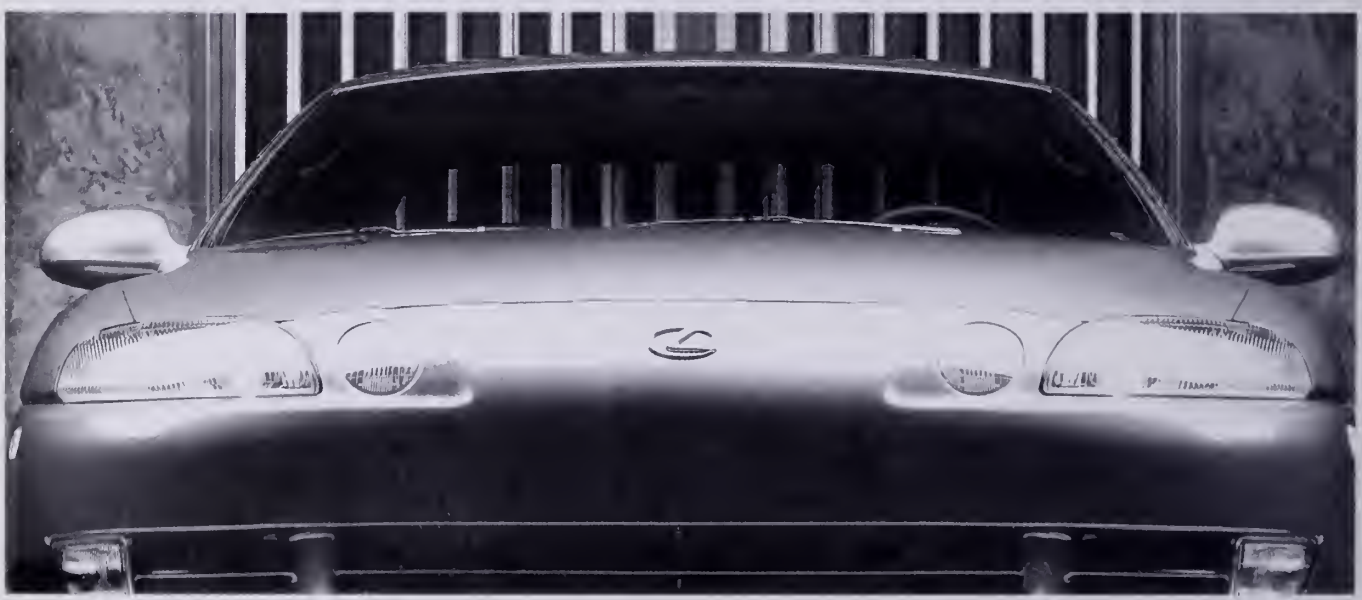
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JOURNAL

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MARCH 1997 VOL. 90, NO. 3

EDITORIAL

An Open Letter to Senator Don Nickles 87
R.V. MCINTYRE, KINGFISHER

PRESIDENT'S PAGE

Thoughts for the Future 88
D.L. HARPER, TULSA

SCIENTIFIC

Living Related Liver Transplantation in Oklahoma 89
M. NEGITA, B. NOUR, A. SEBASTIAN, J.R. GRIGGS, R.B. TORRES-PINEDO, H.I. WRIGHT, E. KATZ; OKLAHOMA CITY

SPECIAL

Smoking in Oklahoma: The Seven-Year Trend 94
N. HANN, A. ASGHAR; OKLAHOMA CITY

The AMA Physician's Recognition Award—A Tool for Your Education, Efficiency, and Success 111
R.E. SHELDON; OKLAHOMA CITY

NEWS

Telemedicine presents new malpractice concerns, 101... Annual Meeting Program, 103... Sponsors and exhibitors are indispensable for successful meeting, 110...

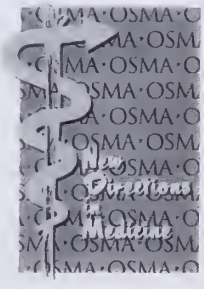
DEPARTMENTS

Worth Repeating, 101... Letters, 110... Health Department, 114... From the Oklahoma Poison Control Center, 116... Rite of spring: Corrections issued for '97 physicians' directory, 117... Deaths, 118... In Memoriam, 118... Classifieds, 118... Alliance, 127... The Last Word, 128

ABOUT THE COVER

The countdown to the Annual Meeting of the OSMA House of Delegates has begun. This year the meeting, "New Directions in Medicine," will be April 24-27 in Tulsa. Complete program begins on page 103.

Annual Meeting theme art by Susan Records. Cover art production by Greg Gilpin, Graphic Art Center, Inc., Oklahoma City.





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An Open Letter to Senator Don Nickles

The Honorable Don Nickles:

The physicians of Oklahoma appreciated the opportunity to meet with you in November for an open forum discussion of upcoming legislative issues related to health care. The many items advanced at that meeting signal the breadth of the anxiety felt by physicians at this time in the evolution of health legislation. We thank you for hearing our worries.

Foremost in many physicians' thoughts is the chronic tension and distraction produced by the structure of the Medicare program. The majority of the American people have now come to realize that Medicare *must* be fundamentally changed in the near future, but it is also overwhelmingly evident that there are now so many voting citizens dependent on Medicare that the needed revisions are a real political "hot potato."

Any realistic solution to the Medicare problem must remove the congenital defects in the program while using a time frame that will not frighten present Medicare recipients and current politicians.

Medicare is congenitally flawed by a lack of a means test, by involuntary conscription of patients, by nonnegotiable price controls, and by non-medical definitions of medical necessity. The present legislative task is to enact statutes that will direct a progressive evolution of health care from involuntary government conscription into democratic freedom of choice.

A government subsidy without a means test is immoral and invariably leads to tension and fiscal jealousy, and this objectionable element must be eliminated from Medicare soon or late. A change to an "affluence test" for Medicare eligibility might make it easier for the publicists to "sell" the needed change.

Medicare is also fundamentally flawed by the mandates that force everyone over 65 years of age to join Medicare if they are to have any medical insurance at all. A real solution to the Medicare problem will include statutes allowing each Medicare recipient a method of opting out of Medicare through a commercial or self insurance program. Only when a true choice of insurance is restored to the retiring citizen will the evils of government monopoly be mitigated.

Basically, Medicare is a government subsidy for the purchase of health care, and only through the application of rigid price controls has it been possible for the program to operate thus far. Some of the applied price controls are generous, some are adequate, and a great many are so penurious that the Medicare patient is an unwelcome liability to a great many physicians' practices. The erratic and illogical evolution of the unilateral fee schedule has contributed significantly to a chaotic medical economic situation that adversely affects the quality of health care outcomes.

Health care is such a huge and diverse commodity that only a free market mechanism has the power and wisdom to regulate its prices fairly. To restore the discipline of a free market price structure on Medicare, Congress must change the subsidy payment mechanism so that the money (and responsibility) will flow through the patients' hands once again.

Broad physician input into Medicare problem solution is a necessary requirement for a successful solution to existing chaos. We note that past Medicare problem "fixes" that excluded or minimized physician input have generally worsened rather than helped the problem. But now the American Medical Association has planned some Medicare reform measures that should be carefully considered by Congress, and included in any Medicare reform legislation.

Senator Nickles, we physicians hope that Congress will now undertake a revision of Medicare that will eliminate the congenital defects that continue to plague the program. The manumission of the U.S. Medicare patient is long past due.

Ray V. McIntyre, M.D.

An editorial is a column of personal opinion that may or may not reflect the official position of the OSMA.

PRESIDENT'S PAGE

Thoughts for the Future

"We are here to add what we can to, not get what we can from, life."
—William Osler



As I leave office as President of the Oklahoma State Medical Association, I want to leave you with some thoughts for the future—ideas to promote growth and a continued fulfillment of our mission. Change will always be with us and change can many times be difficult, but how we adapt determines our effectiveness and our place in the future.

Uncompensated Care and Universal Coverage.—We must be open-minded and creative about possibilities to proceed toward a form of coverage for all citizens as a future goal. There are more and more working poor in Oklahoma who do not have health insurance but do not meet requirements for Medicaid. Oregon has passed a 30¢-per-pack cigarette tax and will use this money (90% for medical coverage and 10% for education of minors about smoking and health issues) to try to bring Medicaid eligibility to 200% of the federal poverty level. We must also strive for adequate reimbursement schedules with any new programs so patients will have adequate access to good medical care. This is a problem which will not go away in the near future in our state, and we should be willing to be creative in obtaining good health care coverage for all our citizens. We in the Oklahoma State Medical Association should continue to encourage insurance coverage for everyone possible, with many types and alternatives available.

Tort Reform.—Although we are presently in a two-year hiatus in our state legislature concerning tort reform legislation, we should continue to make meaningful reform an ongoing goal, with the California MICRA law an example for which to strive. Fair and equitable tort reform should be pushed on both state and national levels until it is obtained.

Patient Protection Acts and Managed Care.—There should be enacted managed care patient rights acts which should include the following points:

1. Physician choice should be preserved in the form of point-of-service options.
2. No gag rules of any kind should be allowed. Physicians must be able to discuss freely with patients any and all options of treatment.
3. A physician should not be penalized for acting as a patient advocate.
4. Clear information about a plan should be provided to patients so they can understand what is and what is not covered.

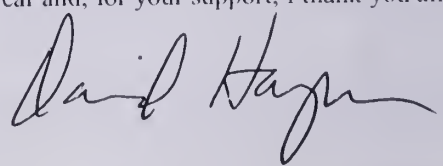
This must be a patient advocacy act and not be perceived as a doctor reimbursement act.

Medicare.—Physician costs of Medicare have risen in the past five years less than any other aspect of cost increases. We need to resolve differences in specialty societies and find a common ground we can support. Patient care advocacy must be first and foremost, but physicians cannot continue to bear most of the brunt of cost containment. Doctors must not be perceived as just groveling over money, caught up in internecine struggles over fees, and we must come together.

Legislative Goals.—We must participate in the legislative process on an ongoing basis. We have stressed this year participating in the "Doctor of the Day" Program, donating to OMPAC, and working with our lobbyists Vickie Rankin and Lynne White, as well as with our Council on Legislation and State Regulation chaired by Dr. Ed Brandt. We may argue among ourselves in day-to-day activities, but when we go before the state legislature and national Congress we should go as one voice representing what is best for medicine and health care.

We also should demand more from our elected officials. They have asked for the right to lead us; and we, in turn, should demand that they act with courage and integrity in making the difficult decisions with regard to health care and other public policy. It is not too much to ask.

We must maintain our professionalism, integrity, and dedication to patients even in an environment of decreasing reimbursement. We of the Oklahoma State Medical Association have made great strides in coming together this year and, for your support, I thank you all.



Living Related Liver Transplantation in Oklahoma

Mosatako Negito, MD; Bakr Nour, MD; Anthony Sebostion, MD; Johnny R. Griggs, MD; Romon B. Torres-Pinedo, MD; Harlan I. Wright, MD; Eliezer Katz, MD

Living reloted liver tronsplontotion (LRLT) presents several odvontoges os compored to cadaveric liver tronsplontotion, ond it hos become an increasingly popular option for children with end-stoge liver diseoses. Since 1995, five LRLT procedures hove been performed at the outhors' focility. Recipients were three boys and two girls, whose mean oge was 2.6 years. Recipients' primory diognoses were primory hyperoxaluria (PH) (n=3), Alagille's syndrome (n=1), and Byler's diseose (n=1). Left loterol segments harvested from their parents were used os the liver grofts on all patients. The donors included three mothers and two fothers, with a mean age of 29 years. Tacrolimus with steroids was used os immunosuppressive theropy. In all coses (meon follow-up time of 11 months), groft function was excellent and four children ore doing very well. One boy died of post-transplant lymphoproliferotive disorder (PTLD) 7 months after LRLT. All donors are doing very well with no postoperotive complicotions. The outhors believe that LRLT is a safe procedure for both the donor and the recipient, ond provides, in children, an excellent alternotive to cadaveric liver tronsplontotion.

Living related liver transplantation (LRLT), the latest modality for children with end-stage liver disease, has been introduced to deal with the severe graft shortage in pediatric liver transplantation. The technical, medical, and ethical aspects of the procedure represent a significant advantage when compared with the reduced liver or split liver techniques.[1] Worldwide experience with the procedure is thus far limited, but patient and graft survival in elective cases has been at least comparable to that achieved with cadaveric grafts, and possibly better. We are reporting here our experience with the first five LRLTs performed in Oklahoma.

Methods

Patient Selection.—From March 1995 through May 1996, five patients, three boys and two girls, underwent LRLT. Mean age and weight at transplantation were 2.6 ± 0.6 years and 11.3 ± 1.4 kg, respectively. Primary diseases were as follows: primary hyperoxaluria (PH) (n=3), Alagille's syndrome (n=1), and Byler's disease (n=1). All patients were transplanted as elective cases. We excluded patients with emergency indications and those whose medical condition was judged to be not stable enough to permit donor evaluation and obtaining of informed consent.

Donors Evaluation.—Donors were selected from volunteers among the parents of the recipients. Five parents, two fathers and three mothers, mean age 29 years, served as living donors for their children. Donor evaluation included: (1) medical, social and family history, and physical examination, (2) psychological evaluation where general ethical issues as well as potential individual psychological and social consequences of living donation were discussed between the fam-

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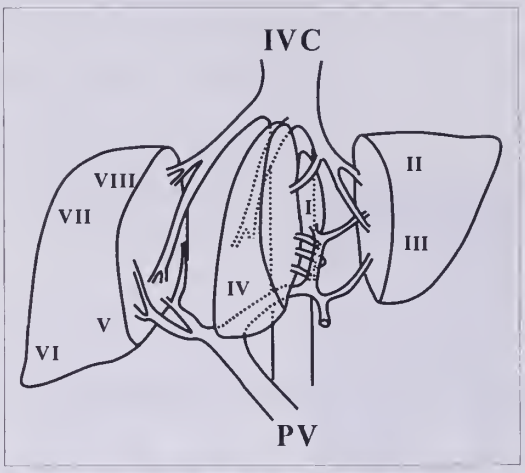


Figure 1. Schematic representotion of the segmental anotamy of the liver based on the branches of the portal vein and the planes of the major hepotic veins. Raman numerals represent corresponding liver segments. Left laterol segment (LLS) is segments II and III. PV = Portol vein; IVC = Inferior vena cava



Figure 2. The operative field immediately before clamping of the vessels. The parenchyma is completely transected. Left hepatic vein (upper side) and left portal vein (lower side) are looped.



Figure 3. The operotive field immediately after removol of the left laterol segment. Left hepotic vein and left portal vein are clamped, followed by oversewing.

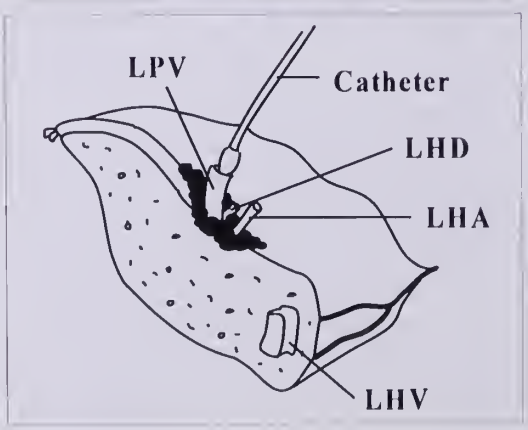


Figure 4. Schematic representation of the liver groft. The removed liver graft is immediately immersed in ice-cold University of Wisconsin solution and flushed via the portal vein and ortery with this solution. LHV = Left hepotic vein; LHA = Left hepotic ortery; LHD = Left hepatic duct; LPV = Left portol vein

ilies and a psychologist, (3) laboratory tests (blood group, immunology, liver function tests, serologies for viruses, etc.), (4) cardiopulmonary function tests, and (5) imaging studies, including ultrasound of the liver, computed tomography (CT) of abdomen with measurement of the volume of the left lateral segment (segments II and III, Fig. 1), and celiac angiography, to assess the exact anatomy of the hepatic artery.

Although preoperative immunologic evaluation, including lymphocyte cross-matching and serologic human leukocyte antigen (HLA) typing, were done in all patients and their parents, these immunological parameters were not taken into consideration in the decision making. Liver biopsy was used in cases of obese donors to rule out fatty changes.

The requirements needing to be met by a parent to be a donor are: (1) psychological fitness to make a free choice to donate, (2) ABO blood group compatibility, (3) no medical contraindication, (4) adequate size of the left lateral segment, and (5) appropriate hepatic artery anatomy.

Donor Operation Technique.—The donor hepatectomy was an anatomic left lateral segmentectomy as described.[2] In this procedure, the initial maneuver was to isolate the left hepatic artery to assure an adequate length and caliber. All portal branches to segment IV were divided along the umbilical fissure, while preserving arterial and biliary elements when possible. The left portal vein was encircled, and the branches to the caudate lobe were divided to assure adequate mobility and length. The left hepatic vein was dissected, encircled, and prepared for clamping. The hepatic parenchyma was dissected by mosquito fraction technique, with meticulous control of all blood vessels and bile ductules, until the left lateral segment was completely separated from segment IV (Fig. 2). This parenchymal dissection was performed with no interruption of the vascular supply to the left liver. While performing the parenchymal dissection, the left hepatic duct was divided in the hilar plate. Simultaneous clamping of the left hepatic artery, left portal vein, and left hepatic vein then allowed the removal of the lateral segment with practically no warm ischemic time (Fig. 3). Immediate flushing with cold (4°C) University of Wisconsin solution (Viaspan, Dupont, Wilmington, Del.) was performed ex situ (Fig. 4). The stumps of the hepatic vessels were closed with the appropriate sutures.

Recipient Operation Technique—All patients underwent orthotopic liver transplantation (OLTX) in a piggy-back fashion, using their donor's left lateral segments (LLSs) as their grafts.

1. Hepatic vein reconstruction.— In all cases,

the donor's left hepatic vein and recipient's middle and left hepatic veins were anastomosed in an end-to-end fashion.

2. Portal vein reconstruction.— Direct, end-to-end portal anastomosis was possible in all cases without the need for interposition graft.

3. Hepatic artery reconstruction.— Surgical procedures used for reconstruction of hepatic artery are shown in Table 1. The saphenous vein from the donor was used as an interposition graft. The arterial anastomosis was performed in all cases with interrupted 8-0, 9-0 sutures. In one case, a microscope was used. In the other cases, loupes with 4x magnification were used.

4. Biliary reconstruction.— A left hepaticojejunostomy with Roux-en-Y anastomosis was performed for biliary reconstruction.

Immunosuppression consisted of tacrolimus (Prograf, Fujisawa, Japan) in combination with steroids.

Graft Assessment: Graft function was classified into our three categories of good, adequate, and poor, based on the synthetic liver function (prothrombin time [PT], lactic acid), hepatocellular damage (serum aspartate aminotransferase [AST], alanine aminotransferase [ALT]), and renal, cardiovascular, and neurological status.

Table 1. Surgical Procedures for Hepatic Artery Reconstruction

Anastomosis (Graft-Recipient)	No.
LHA-PHA*	3 (60%)
LHA-PHA with graft interposition	1 (20%)
LHA-Aorta with graft interposition	1 (20%)

*LHA = Left hepatic artery, PHA = Proper hepatic artery

Results

Donor Survival and Complications.—All donors had normal liver function and no history of liver diseases. Table 2 summarizes the profiles of the donors. The donors consisted of two fathers and three mothers with an average age of 29 ± 1 years and an average body weight of 75.1 ± 10.6 kg. The two men underwent liver biopsy; test results were normal. One father had endoscopic retrograde cholangiography (ERCP) because of the diagnosis of his child (Byler's disease). No blood transfusion was necessary during surgery. There were no perioperative or postoperative complications. All donors were discharged from the hospital on postoperative day (POD) 6 to 10 (mean 8). They all are doing very well since discharge, with mean follow-up of 11 months.

Recipient Outcome.—Mean follow-up period was 11 months (7–21 months). In all patients, initial graft function was excellent. Four of five children survived (80%) and their graft function is very good. One patient died 7 months after LRLT due to very severe PTLD (post-transplant lymphoproliferative disorder[3]) of the brain and small bowel. Another patient underwent cadaveric kidney transplantation 3 months after LRLT. This was complicated with acute tubular necrosis for 3 weeks, as well as pressure injury to the liver. She recovered completely from both complications. In our series, the mean donor/recipient (D/R) body weight ratio was 6.72 ± 0.68, and the mean volume of the LLSs was 241 ± 22 ml. Early postoperative mean peak AST and ALT levels are shown in Table 3. Four cases were ABO blood group identical and one case was ABO compatible. Direct crossmatch was negative in all cases. Other data including prognoses are shown in Table 4. No patient had any vascular or biliary complications. Mean period of postoperative hospitalization was 21 ± 10 days. However, except for the first case (hospital stay 63 days), that of 4 patients was 11 ± 1 days. Only the first case (20%) developed acute

Table 2. Donor Profiles and Peak Transaminase Levels

Donors	Relation to patient	Age (years)	Wt (kg)	D/R[1] Wt. Ratio	Size of LLS[2] (mL)	Blood Type (ABO, Rh)	Peak AST (U/L)	Peak ALT (U/L)	Hospitalization (POD)[3]
N.F.	Fother	29	109	6.53	309	O+	398	423	6
R.A.	Mother	28	57.9	6.81	174	O+	58	60	9
S.A	Mother	31	64.9	6.49	225	B-	64	46	10
A.N.	Mother	30	53.7	4.75	254	A+	116	107	10
A.S.	Fother	29	90	9	243	B+	211	257	6
Mean		**29**	**75.1**	**6.72**	**241**		**169**	**179**	**8[5]**
(range)	**F2;M3[4]**	**28~31**	**53.7~109**	**4.75~9**	**174~309**	**A1:B2:O2**	**58~398**	**46~423**	**6~10**
SE[6]		**1**	**10.6**	**0.68**	**22**		**63**	**72**	**1**

1 D/R=Donar/Recipient
2 LLS=Left lateral segment
3 POD=Postaperative days
4 F=Father; M=Mather
5 Median=9
6 SE=Standard Error

cellular rejection, which responded to steroid treatment. Thereafter, this patient developed EB virus infection (PTLD) of the small bowel and he has been off immunosuppressive agents for 6 months. This patient is now managed with only tacrolimus, with excellent liver function tests.

Discussion

The procedure of using living related donors for liver transplantation was developed by Broelsch, et al.[2] LRLT can provide an excellent graft for the small pediatric recipient at little risk to the donor. In patients with normal liver function and no general medical risk factors, hepatic resections have been performed with a very low mortality rate.[4] In the world's experience of LRLT (more than 500 cases), there has been one case of mortality of the donor. The removal of the LLS presents the smallest possible trauma to the donor's liver. Vital hilar structures on the remaining right side are virtually untouched. This makes the operation much easier, reduces the trauma to the donor, and avoids potential complications resulting from full mobilization of the liver. Potential problems at the site of the hepatic venous junction are easier to control, because the vena cava and the caudate lobe are not traumatized through dissection, as would be required for a left hepatectomy. The confluence of the bile ducts does not require dissection, cholecystectomy need not be performed, and a T-tube cholangiography is not necessary, preventing traumatization and future scarring.[2]

One of the key issue on LRLT is adequate size of the graft.[1] The D/R body weight ratio is one of the parameters being used to assess the adequacy of the graft size. Some authors propose that LLS grafts should be applied to the recipients

Table 3. Potients Profiles ond Peok Transaminose Levels

Patients	Primary Diseose	Age (Years)	Sex	Wt (kg)	Blood Type (ABO, Rh)	CMV[1]	CIT[2] (Min)	WIT[3] (Min)	Peak AST (U/L)	Peok ALT (U/L)
M.F.	Alagille's syndrame	3.6	M[4]	16.7	O-	N[5]	249	49	2036	1060
R.A.	Primary hyperaxaluria	1.9	F	8.5	A+	P	179	99	1665	1194
H.A.	Primary hyperaxaluria	1.3	M	10	B-	N	156	64	851	493
R.N.	Primary hyperaxalura	4.3	F	11.3	A+	N	215	82	410	180
W.S.	Byler's disease	1.8	M	10	B-	P	246	66	642	727
Mean		**2.6**		**11.3**			**209**	**72**	**1121**	**731**
(range)	**PH[6]3: Alagille1: Byler1**	**1.3~4.3**	**M3:F2**	**8.5~16.7**	**A2:B2:01**	**P2:N3**	**156~249**	**49~99**	**410~2036**	**180~1194**
SE		**0.6**		**1.4**			**18**	**9**	**312**	**185**

1 CMV=Cytomegoolvirus ontibody
2 CIT=Cold ischemic time
3 WIT=Worm ischemic time
4 M=Mole; F=Femole
5 N=Negotive; P=Positive
6 =Primory Hyperoxolurio

Toble 4. Results and Prognosis

Patients	Groft Function	Complicotions	Hospitolization (POD)[1]	Follow-Up Period (months) & Survival	Current Immunosuppression
M.F.	Gaad	Melena, madACR[2], CMV, EBV infectian	63	21, Alive	FK
R.A.	Goad		9	10, Alive	FK+steraid
H.A.	Gaad	Melena, PTLD[3] - brain & bawel	12	7, Dead	—
R.N.	Gaad	Pressure-induced hepatic ischemia fallawing RTx[4] (done 3 ma past LRLT)	10	8, Alive	FK+steraid
W.S.	Gaad	Melena, delayed abdaminal clasure	12	7, Alive	FK+steraid
Meon			**21[5]**	**11**	
(ronge)	**Good5**	**Meleno3 : virus infection2 : ACR1**		**7~21**	
SE		**Hepotic ischemio1 : Delayed closure1**	**9~63**	**Alive4 : Deod1**	**FK1 : FK+steroid3**
			10	**3**	

1 POD=Postoperotive doys
2 modACR=moderote Acute cellulor rejection
3 PTLD=Post-tronsplont lymphoproliferotive dirorder
4 RTx=Renol tronsplontotion
5 Medion=12

whose D/R body weight ratios were 4 to 10.[1,2,5,6] The volume of the grafts in our experience was slightly higher than what was reported elsewhere,[7] and the D/R body weight ratio (6.72 ± 0.68) fell in the above recommended range.

The clear advantage of LRLT is the high quality graft from a healthy donor and a short cold ischemic time (CIT) as compared to cadaveric reduced, split, or whole liver transplantation. Average CIT in cadaveric OLTX in our institute is 11 h 20 m (n=195). In contrast, that of living related cases was 3 h 29 m. This short CIT minimizes the damage caused by cold preservation. The rejection rate was low (20%) compared with the usual rate of rejection in liver transplantation (50–60%). Although the number of patients is small, this finding may indicate some immunological benefit of LRLT.

The arterial reconstruction in LRLT is a technical challenge. The left hepatic artery is extremely small and short. Therefore, hepatic artery thrombosis is not a very rare complication.[8,9] Although some authors have advocated the use of surgical microscope to assist in preventing thrombosis,[10] microscopic procedure was actually applied for only the first patient in our series. For the other patients, we did the hepatic artery reconstruction using the surgical loupe. Nevertheless, we have not encountered any cases of hepatic artery thrombosis.

The shortage of pediatric donors with a significant mortality on the waiting list has moved to the development of LRLT. This technique has several merits and our results as well as others are very satisfactory. Our results emphasize the importance of LRLT in producing a high quality graft with some immunological advantage, on a scheduled elective basis. The time of transplantation can be planned and set when it looks best for the recipient.[11] Using LRLT in children with fulminant hepatic failure could significantly reduce death and morbidity rates. LRLT appears to be a significant development that could have a major impact on the ability to transplant children with end-stage liver disease and to obtain excellent results. J

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Smoking in Oklahoma: The Seven-Year Trend

Neil Honn, MPH; Arthur Asghor, MBA, MPH

Background: The serious health consequences of smoking have been known to us for more than 30 yeors. Every year, research brings forth more serious consequences of this risk foctor. These ore reviewed by us. The yeor 2000 will soon be with us. We need to know where we stand in relotion to the year 2000 objectives with regord to smoking. **Study design:** The study design is cross-sectional. **Methods:** This study is bosed on the doto obtained during the yeors 1989 through 1995 from the Oklohoma Behoviorol Risk Factor Surveillonce System. **Results and Conclusions:** There hos been o significant decreose in the prevolence of smoking in Oklohomo in the lost seven yeors. Although there hos been no significont change in smoking among females in the lost seven years, smoking among males has dropped significontly, especially in the last two yeors of the study, 1994 and 1995. The prevolence of smoking in 1995 wos the some among males and femoles, ot about 22%. In age groups 18-24 ond 25-34, there hos been no significont chonge in smoking since 1990. The prevolence of smoking is reloted to the level of education; the higher the education the lower the prevolence of smoking. Smoking omong those with college or higher level educotion has remoined ot obout the same level, 15%, in the lost seven yeors. Among those with less thon high school educotion, smoking has remoined the some ot obout 30% over the lost seven yeors. Prevolence of smoking is the highest among American Indions. Smoking among whites (non-Hisponic) shows o significant decreose from about 26% in 1990-91 to about 22% in 1994-95. Among white moles, smoking hos significantly dropped from 31% in 1989 to about 22% in 1995. In 1995, smoking was almost the some in the two sexes ot about 22%. We need to achieve o reduction of 7% in the overoll prevolence rate of smoking in the coming yeors to achieve the Yeor 2000 objective. To effect this reduction, our efforts at heolth promotion and community mobilization will hove to be strengthened. Further, with the prevolence rote of oround 25% in 1995 among women of reproductive oge, and the yeor 2000 target of 12%, it is opparent thot very strenuous efforts will hove to be mode omong this group in our populotion to ochieve Year 2000 objectives.

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During the past four decades we have known that cigarette smoking has serious health consequences. In 1979, the Surgeon General's Report said that nicotine, which is present in all forms of tobacco, is a powerful addicting drug.[1] Smoking is called the chief preventable cause of premature death. Studies show that cigarette smoking is responsible for more than 434,000 deaths each year in the United States.[2]

Smoking is termed the most devastating epidemic this nation has ever experienced. The epidemic began in the twenties of this century. In 1915, most tobacco was used for pipes, cigars, and chewing tobacco. Fewer than 20 billion cigarettes were smoked at that time. Lung cancer was virtually unknown. Even as late as 1935, there were fewer than 5,000 deaths from this disease.

Now Americans smoke more than 600 billion cigarettes each year, and about 120,000 men and women die of lung cancer every year.[3]

Smoking is:

- the major cause of lung cancer
- the major cause of deaths from emphysema and chronic bronchitis
- the principal cause of heart disease and stroke.

Nonsmokers in close proximity to smokers are exposed to environmental tobacco and inhale thousands of chemicals during "passive" smoking. It is estimated that passive smoking may kill as many as 53,000 Americans yearly. One analysis estimates that about 35,000 of these deaths are from heart disease. In addition, environmental smoke imposed upon children causes 150,000 to 300,000 cases of bronchitis and pneumonia each year and worsens asthma in up to one million children annually.[4]

Health Consequences of Smoking: Some Recent Results

In addition to the consequences known to us for the last 30 years, recent research adds to the adverse health consequences of smoking as follows:

• In the Nurses' Health Study, a total of 31,843 registered nurses were enrolled in 1980. They were aged 50 to 59 years at enrollment and did not report a diagnosis of cancer or AMD (age-related macular degeneration) at the beginning of the study. Additional women entered the analytic cohort as they reached 50 years of age. One of the conclusions drawn from this study, reported in the *Journal of the American Medical Association (JAMA)* of October 9, 1996, is that cigarette smoking is an independent and avoidable risk factor for AMD among women. Because AMD is the most common cause of severe visual impairment among the elderly, and treatment is not available or is ineffective for most patients, reducing the risk of this disease is another important reason to avoid smoking.[5]

• In the Physicians' Health Study, a total of 21,157 US male physicians who did not have a diagnosis of AMD at baseline, and had known levels of baseline smoking, were followed for at least seven years. Based on information reported at baseline, 11% were current smokers, 39% were past smokers, and 50% were never smokers. The data from this prospective study provide support for the hypothesis, reported in *JAMA* October 9, 1996, that cigarette smoking increases the risk of developing AMD in men.[6]

• Smoking engenders a feeling of being emotionally stressed. After quitting, former smokers report a reduced feeling of emotional stress.[7]

• Maternal smoking inhibits early human cytotrophoblast differentiation. Differentiation of the specialized epithelial cells of the placenta, termed cytotrophoblast, is an important aspect of placental development during the first trimester of pregnancy. Maternal smoking inhibits the trophoblast differentiation pathway that leads to column formation and uterine invasion. This effect, due at least in part to the effects of nicotine, may contribute to the growth retardation observed in fetuses of mothers who smoke during pregnancy.[8]

• Men who smoke have poor semen quality. Nicotine at concentrations of 1 mM or higher significantly decreases sperm motion characteristics.[9]

• Nicotine abuse may cause severe nephrourologic disease such as nephrosclerosis, hypertension, and tumor of the bladder.[10]

• Cigarette smoking can lead to the following adverse effects on the skin and mouth of the smoker: (1) yellow fingers, (2) enhanced wrinkling, especially in the faces of females, (3) precancerous lesions and squamous cell carcinomas on lips and oral mucosa and (4) vasospasms and obliterations of large arteries as well as of small skin vessels.[11]

• Depression is overrepresented among smokers. Also, depressed smokers appear to experience more withdrawal symptoms on quitting, are less likely to be successful at quitting, and are more likely to relapse.[12]

• Cigarette smoking and nicotine delay postprandial mouth-cecum transit time.[13]

• The association between cigarette smoking and delayed wound healing is recognized in clinical practice. This delay is caused by the toxic constituents of cigarette smoke: nicotine, carbon monoxide, and hydrogen cyanide. Nicotine is a vasoconstrictor that reduces nutritional blood flow to the skin, resulting in tissue ischemia and impaired healing of injured tissue. Nicotine also increases platelet adhesiveness, raising the risk of thrombotic microvascular occlusion and tissue ischemia. Nicotine also reduces proliferation of red blood cells, fibroblasts, and macrophages. Carbon monoxide diminishes oxygen transport and metabolism. Hydrogen cyanide inhibits the enzyme systems necessary for oxidative metabolism and oxygen transport at the cellular level. Compared with non-smokers, smokers have a higher incidence of unsatisfactory healing after plastic surgery as well as a greater degree of complications following breast surgery.[14]

• A significant correlation exists between nicotine concentration in the hair of the neonates and

(continued)

in the hair of their mother if the mother smokes during pregnancy.[15]

• Smoking reduces fetal growth and nicotine appears to be the causative factor in growth retardation. However, smoking before pregnancy or early in pregnancy is not related to growth retardation.[16]

• A very high collagen increase occurs in the placenta of smoking mothers. This large collagen increase may account for the noxious effects of tobacco on pregnancy.[17]

• Smoking is a risk factor for coronary heart disease. Psychological stress is also cardiopathologic. Smoking tends to increase when we undergo stressful situations. The effect of smoking and stress combined is much greater than the effect of each factor alone.[18]

Purpose of Our Study

We have outlined above the well known as well as the recently discovered adverse consequences of cigarette smoking. It is imperative that this modifiable and preventable risk factor be mitigated in our population. Toward this end, Oklahoma has made concerted efforts during the last five years to reduce the prevalence of smoking. This has been done through community mobilization and education. In particular, the Tobacco-Free Oklahoma Coalition, representing several volunteer and state agencies, educators, businesses, and concerned citizens, has had a significant impact in bringing tobacco use prevention issues to the attention of the public and state leaders. In addition, concentrated efforts to help prevent children from using tobacco products have been implemented through the Governor's Task Force on Tobacco and Youth and through statewide educational programs for children. These programs include Tar Wars, a tobacco use prevention education program for 5th grade students, and High School Heroes, a program in which high school students teach 3rd grade students about the hazards of tobacco use.

Our interest is to investigate how the prevalence of smoking has varied over the last seven years as well as to assess the effectiveness of the programs undertaken to reduce the prevalence of smoking in Oklahoma. The seven-year period of time, 1989 through 1995, was chosen due to the availability of smoking prevalence data for Oklahoma for this period.

Table 1. BRFSS Sample Size

1989	1990	1991	1992	1993	1994	1995
1172	1375	1509	1511	1509	1829	1779

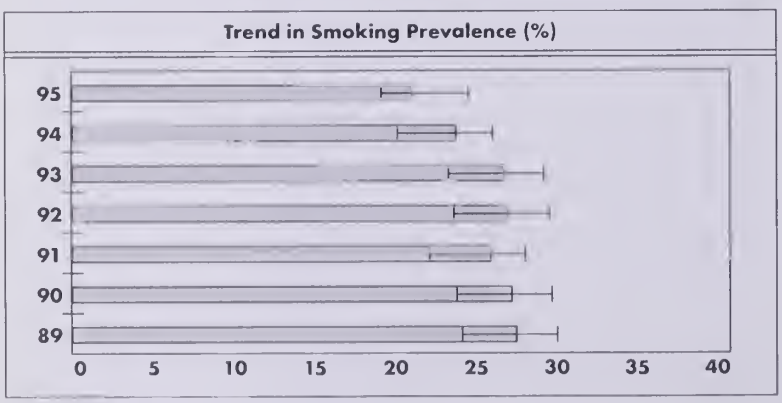


Figure 1.

Method

This study is based on the data from the Oklahoma Behavioral Risk Factor Surveillance System (BRFSS). The surveillance system is administered by all the 50 states with technical guidance and financial support from the Centers for Disease Control and Prevention (CDC). The BRFSS monitors the prevalence of health behaviors and lifestyles that affect the health of the people. The CDC launched this surveillance system in 1984 in some of the 50 states. The Oklahoma State Department of Health chose to start this survey in 1988.

BRFSS is a telephone-administered survey. Up to December 1993, the interviewers used a pencil-and-paper method to record responses. Since January 1994, this survey has been conducted using the Computer-Aided Telephone Interview System (CATI).

Under BRFSS, the Oklahoma State Department of Health and the health departments of other participating states conduct monthly surveys using a questionnaire that has been standardized by the CDC. The questionnaire can be extended by adding a component which comprises state-added questions; this allows a particular state to add questions to the BRFSS questionnaire on health topics that may be of particular interest to that state or the region in which the state lies.

The response data for the state are sent to the CDC for editing and weighting. They are analyzed and tabulated by the CDC and returned to the state. The CDC aggregates the data from all the states and publishes nationwide estimates of the prevalence of the behavioral risk factors. The edited and weighted data are then returned to the state.

In the past, the annual sample size for Oklahoma BRFSS has varied from 1,172 in 1989 to 1,779 in 1995, as shown in Table 1.

BRFSS uses a three-stage cluster sampling technique where the cluster is a group of telephone

numbers drawn from a bank of 100 telephone numbers. A sample of three adults is selected from each cluster. BRFSS uses the Waksberg Random Digit Dialing scheme.

For this study, we used the Oklahoma BRFSS data for the years 1989 through 1995. The data were analyzed using statistical methods such as exploratory data analysis, cross-tabulation into contingency tables, and hypothesis testing using confidence intervals. Because BRFSS is a multistage survey, SUDAAN[19] software was used for analyzing the data from this survey.

Results

The Seven-Year Trend.—The weighted prevalence of smoking in Oklahoma for each of the seven years, 1989 through 1995, is shown in Figure 1.

On each prevalence bar is plotted the 95% confidence interval. This interval helps us to test the null hypothesis that there is no significant difference in prevalence between any two years. Overlapping confidence interval bars imply no significant difference in prevalences. If we compare the prevalence of smoking in each year with the succeeding year starting with 1989, we find that the confidence interval bars overlap, indicating that there is no significant difference between any given year and the succeeding year, although there is a gradual reduction in the prevalence of smoking with each passing year. If we compare the prevalence of smoking in the years 1989 through 1990 with that in 1995, we find that there is a significant difference in the prevalence rate of smoking. We therefore conclude that there has been a significant decrease in the prevalence of smoking in Oklahoma in the last seven years. This decrease has occurred primarily in two years, 1994 and 1995.

Trend in Smoking by Gender.—We were interested in knowing whether the decrease in smoking over the last seven years has been different in the two sexes. Figure 2 shows the trend in the prevalence of smoking in Oklahoma by gender.

This chart shows the prevalence of smoking among male and female respondents for each year, together with the 95% confidence interval bars. If we compare the prevalence between the males and females in any one single year, we find that the confidence interval bars overlap, showing that there is no significant difference between the two sexes in any one single year. Considering female smokers alone, we find no significant change in smoking in the last seven years. Although the prevalence rate for 1995 is smaller than that in 1989, the decrease is not significant at the 95% level as

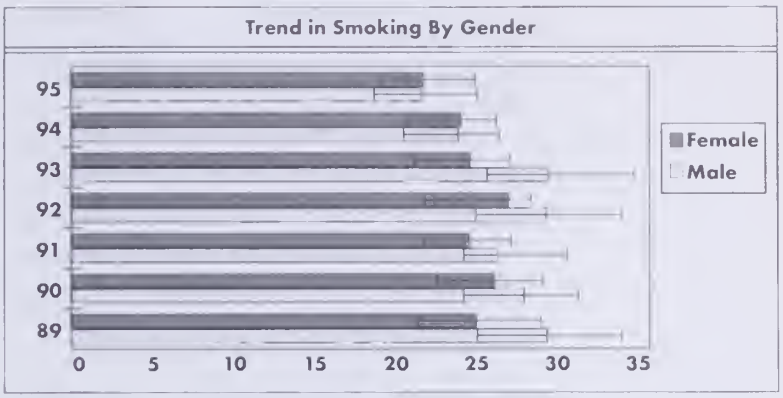


Figure 2.

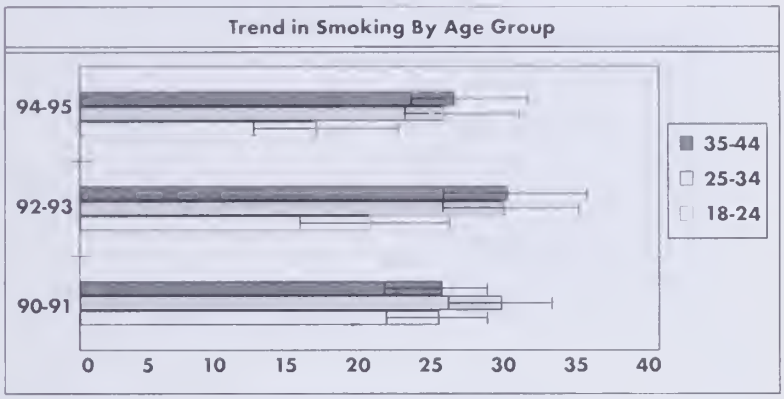


Figure 3.

shown by the overlapping confidence interval bars. If we look at the male smokers alone, we find that the prevalence of smoking among males has dropped significantly, especially in the last two years, 1994 and 1995. The prevalence of smoking among males has always been somewhat higher than among females. However, the decrease in prevalence of smoking among males has shown a rapid decline in the last two years with the result that the prevalence is equal among males and females in 1995 at about 22%.

Smoking by Age Group.—The trend in smoking by age group is shown in Figure 3.

The BRFSS sample comprises adults with age ranging from 18 through 100+. We categorized age into subgroups, 18-24, 25-34, 35-44, 45-54, 55-64, 65-75, and 75+. We were interested in the trend in prevalence of smoking in age groups, 18-24, 25-34, and 35-44; these age groups among females conform to the reproductive years. However, by focusing on these three groups, we lose a part of our sample for age groups 45+. When we subdivided the sample for each year into three age groups, the sample sizes in each category came out to be rather small, giving us very wide confidence intervals, which did not permit us to draw any significant conclusions. Hence, we decided

to aggregate the responses for two consecutive years to get larger group sizes. Figure 3 shows the resulting prevalence rates together with the 95% confidence interval bars.

We conclude from the chart that in the age groups, 18-24, 25-34, and 35-44, there has not been any significant drop in smoking since 1990-91. However, in the age group 18-24, there has been a steady decline in the prevalence of smoking since 1990-91. Comparing the prevalence rate in 1990 with that in 1995, we see that the rate has declined significantly ($0.05 < p < 0.10$).

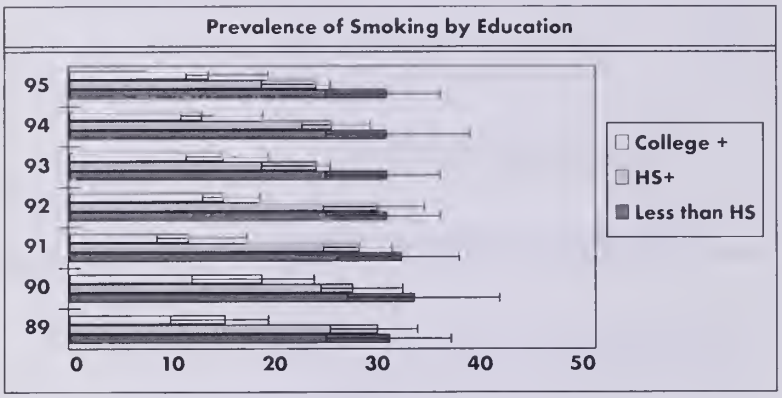


Figure 4.

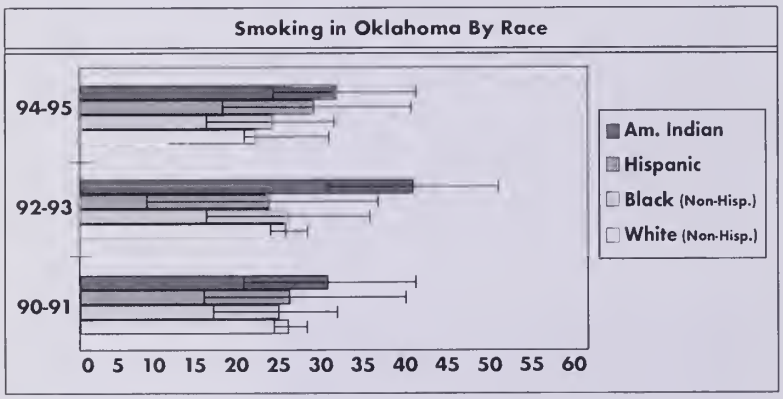


Figure 5.

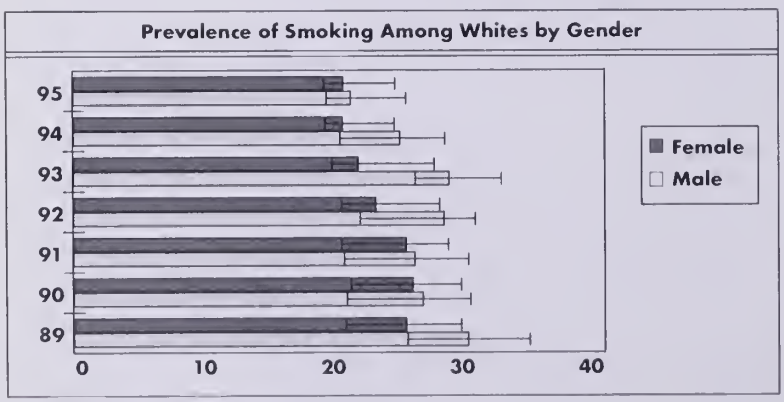


Figure 6.

Smoking by Level of Education.—Are the educationally different groups different in the prevalence of smoking and has there been an increase or decrease in smoking over the years in these groups? To answer this question we categorized education into three groups: (1) persons with less than high school education, (2) high school graduates but less than college graduates, (3) college graduates and those with higher degrees. The trend in smoking in these groups is shown in Figure 4.

We see a general pattern—the prevalence of smoking is inversely related to the level of education; the higher the education the lower the prevalence of smoking. We note that the prevalence of smoking among persons with college or higher education is significantly lower than those with less than college education. The prevalence of smoking among those with college or higher level education has remained at about the same level, 15%, in the last seven years. Similarly, the prevalence of smoking among those with less than high school education has remained the same at about 30% over the last seven years. However, there has been a steady decline of smoking among those who have completed high school but not college. Among this group, the prevalence (22%) in 1995 was significantly lower than the prevalence (30%) in 1989.

Prevalence of Smoking by Race.—The BRFSS sample (88% white in 1995) reflects the race distribution of Oklahoma, which is predominantly white. Hence, for this group, BRFSS gives a large enough sample each year but not for the minorities. We decided to aggregate the data for two consecutive years to get larger sample sizes. The prevalence of smoking by race with the samples for two consecutive years is shown in Figure 5.

The prevalence of smoking is the highest among American Indians. At about 35%, it is significantly higher than among whites (25%). The prevalence of smoking among whites shows a significant decrease—from about 27% in 1990–91 to about 22.5% in 1994–95. No such conclusions could be drawn about other races due to small sample sizes.

Smoking among whites by gender is shown in Figure 6.

The prevalence of smoking has shown a steady drop in both sexes. However, in each year, there is no significant difference in the prevalence of smoking among the two sexes as shown by the overlapping 95% confidence interval bars. We note that the prevalence of smoking among white males has dropped significantly since 1989 (31%), to about 22% in 1995. At about 22%, the prevalence in 1995 was almost the same in the two sexes.

Discussion

In April 1996, the Oklahoma State Department of Health developed the *Healthy Oklahomans 2000 Sentinel Objectives*.[20] According to the sentinel objectives, the prevalence of smoking among persons 20 years of age and older would be reduced to no more than 15% by year 2000. In 1995, the overall prevalence rate was 22%, significantly lower than 27.5% in 1989. In the last seven years, we have achieved a decrease of 5.5%. In the five years from 1995 to 2000, we must achieve a reduction in the prevalence of smoking of 7% to achieve the target of 15%. Although impressive gains have been made, our efforts at health promotion and community mobilization will have to be further strengthened to achieve the year 2000 sentinel objective.

Healthy People 2000[21] enjoins that among women of reproductive age, the prevalence of smoking be reduced to 12% by the year 2000. In Oklahoma, in 1995, the prevalence of smoking among women of reproductive age was as given in Table 2.

It is apparent that much ground needs to be made up if we are to achieve the objective written in *Healthy People 2000*. We must target this group (women of reproductive age) of our population for special attention.

Conclusions

We summarize the results of our study as follows:

- There has been a significant decrease in the overall prevalence of smoking in Oklahoma in the last seven years. This decrease has occurred primarily in 1994 and 1995.
- Considering female smokers alone, in Oklahoma, there has been no significant change in smoking in the last seven years.
- The prevalence of smoking in 1995 was the same among males and females—about 22%.
- In the age groups 18-24 and 25-34, there has not been any significant drop in smoking since 1990. However, among young people (the age group 18-24), there has been a steady decline in the prevalence of smoking since 1990.
- The prevalence of smoking is inversely related to the level of education; the higher the education, the lower the prevalence of smoking.
- Among those with college or higher level education, smoking has remained at the same level, about 15%, in the last seven years.
- Among those with less than high school education, the prevalence has remained the same, about 30% over the last seven years.
- There has been a steady decline of smoking among those who have completed high school but not college.
- The prevalence of smoking is highest among American Indians.
- Among whites, smoking shows a significant decrease, from about 27% in 1990-91 to about 22.5% in 1994-95.
- Smoking among white males has significantly dropped since 1989, from 31% to about 22% in 1995. At about 22%, the prevalence in 1995 was almost the same in the two sexes.
- To achieve a reduction of 7% in the prevalence of smoking in the coming years, our efforts at health promotion and community mobilization will have to be further strengthened to achieve the year 2000 sentinel objective.
- With the prevalence rate of around 25% in 1995 among women of reproductive age, and a year 2000 target of 12%, it is apparent that very strenuous efforts will have to be made in this group of our population to achieve the target.
- We surmise that the possible reasons for reduction in the prevalence rates of tobacco use among Oklahomans include concerted prevention efforts by groups such as Tobacco-Free Oklahoma Coalition and the Governor's Task Force on Tobacco and Youth. These efforts and others must continue to ensure the ongoing downward trend in tobacco use. J

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WORTH REPEATING

How to Avoid Medicare's Implosion

By Phil Gramm

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Medicare insolvency is fast becoming one of the most severe financial crises in the history of the U.S. government. The cost of preserving Medicare benefits for our children as well as our parents is staggering under the best of circumstances and unbearable under current policy. The bad news is that neither the president nor the Congress has made a proposal that would resolve the problem. The good news is that with decisive action now, the cost of preserving retirement health benefits can be contained, and benefits can be guaranteed permanently.

For the last 15 years, the cost of Medicare has grown at an average annual rate of 11%, faster than any other federal program. To pay for those benefits, the Medicare tax has exploded from 0.7% of the first $6,600 of wages 30 years ago to 2.9% of every dollar of wages earned today. Medicare this year will spend every penny of taxes it collects from workers, every penny of premiums from beneficiaries, plus $60 billion of general revenues, and still will be forced to draw down its reserves by $9.7 billion just to pay for current benefits. It gets worse: Medicare will exhaust its cash reserve within four years and be $500 billion in debt in 10 years.

Add in the aging population, which will increase the number of new retirees by 800% in 15 years, and we have a real disaster on our hands. When Medicare started in 1965 there were 5.5 workers for each of the 19 million beneficiaries; today there are 3.9 workers for each of the 37 million beneficiaries. Medicare trustees estimate that by 2030, when the last baby boomer turns 65, there will be only 2.2 workers per beneficiary. That makes Medicare—which depends on direct transfer payments from workers to retirees—unsustainable.

Making Medicare sustainable over the long term requires two policy changes. First, we must stop the explosion of per capita costs by giving beneficiaries a choice among competing health-care delivery systems. In other words, introduce into Medicare the kind of competition that has already reduced private-sector healthcare costs. Then we must move from a transfer-payment system to an investment-based system in which people build up assets during their working years to fund their medical costs in retirement. Restructuring Medicare will cost money in the short term because we'll have to live up to our obligations to the already retired and the about-to-be-retired. But restructuring the system now will save vastly more money in the long run and avoid a Medicare catastrophe.

Today, like all American workers, 22 year olds pay 2.9% of their wages in Medicare taxes. Thomas R. Saving and

Telemedicine presents new malpractice concerns according to physician insurers association

Doctors may confront a variety of new professional liability concerns through the use of telemedicine, according to a recent report prepared by the Physician Insurers Association of America (PIAA), a trade association representing companies collectively providing malpractice insurance to 60% of the physicians practicing in the United States.

The report, the results of which were published in a booklet entitled *Telemedicine: An Overview of Applications and Barriers,* outlines a number of questions that physicians and their malpractice carriers should consider about the use of telemedicine.

"Telemedicine offers many exciting new possibilities for improving the health care system," said PIAA Loss Prevention and Research Consultant Lori Bartholomew. "To date, however, there is no case law to clarify the role of the telephysician and his potential liability when acting in that capacity." Some PIAA concerns include:

• Does a remote encounter via telemedicine constitute a physician-patient relationship, thereby creating a legal connection between the parties? For example, if a doctor in another state asks a radiologist to examine a patient's x-ray via telemedicine, has a doctor-patient relationship been established, even though the radiologist has never met the patient? Could the radiologist be named in a malpractice lawsuit filed against the

Medicare's implosion *(cont.)*

Andrew J. Rettenmaier at Texas A&M University have found that those 22 year olds instead could use just 1.3% of their wages to purchase an insurance policy that would provide health coverage roughly equivalent to Medicare once they hit 65. And that's only assuming a 3% real rate of return on investment. If the 22 year olds instead got a 6.5% real return—the average of the Standard & Poor's 500 over the last 70 years—they would have to invest less than 0.4% of wages. It's startling to realize that today's 22 year olds are paying up to seven times more than they need to for retirement health care, yet it's virtually certain they'll never receive benefits comparable to those being provided to today's retirees.

An even more startling figure generated by Profs. Saving and Rettenmaier is that the average 39-year-old worker could over the remaining 26 years of his working life build up an annuity that would fully fund a private health policy for his retirement years. That's assuming he'll spend 2.9% of his wages—the current Medicare tax—and receive a 3% real return rate. If the s&P 500 rate-of-return is assumed, workers as old as 48 could switch over to an investment-funded system and, by investing 2.9% of wages, build up an annuity to fund retirement medical care in just 17 years.

It is instructive to see what a bad deal Medicare is for young and middle-aged workers and how unsustainable the current system is. But how much would it cost if we converted to an investment-based system and paid off the unfunded liabilities of the current system? Profs. Saving and Rettenmaier estimate that the unfunded liability would be a staggering $2.59 trillion if all workers under 39 were allowed to switch into the new system while everyone else remained in the current Medicare program. This vast number is the difference between the projected cost of Medicare benefits for those 40 and older, who would remain in the current system, and the existing "trust fund" plus the projected taxes and premiums they will pay into the system in the future. Leaving the Medicare system unchanged keeps the unfunded part of the program hidden but guarantees it will grow every day.

One way of paying off this incredible debt would be to phase out of the current system over 50 years by keeping the payroll deduction at 2.9% while moving younger workers into an investment-based system. The surplus funds generated by the current tax rate could be used to pay for the unfunded liability of the current system. With a 50-year phase out, the present value of the unfunded liability would fall to $565 billion. This liability could be paid off in inflation-adjusted annual payments of $22 billion over the next 50 years. That may sound like a lot of money, but it's just 1.4% of what the federal government spent last year.

And remember: The cost of doing nothing is even higher. If Medicare is left unchanged, the present value of the unfunded liability grows to $3.9 trillion in 10 years and to $6.1 trillion in 20 years.

If we're going to save Medicare, it's essential that Washington level with the American people. We need to alert Americans to the unfunded liabilities in the current system. We need to tell them that we can protect current beneficiaries, while providing a secure retirement for today's workers. And the sooner we do this, the cheaper it will be. It will be politically difficult to stop the explosion of per-capita Medicare costs, and it will certainly to expensive to move from the existing transfer payment system into an investment-funded retirement health care program, but like the Fram oil filter commercial, you can pay now, or you can pay a lot more later. J

Sen. Gramm (R., Texas) is chairman of the Health Care Subcommittee of the Finance Committee.

Telemedicine and malpractice *(continued)*

doctor who requested his opinion?

• Where are malpractice claims filed in cases where a doctor has treated a patient in a different state through telemedicine? Since there is no clear guidance regarding where an injured party may bring an action against a physician in these cases, it could create an environment where plaintiffs hunt for the jurisdiction having the greatest potential for lucrative awards. This could lead to a situation where some areas are "red lined" in terms of access to telemedicine.

• Like licensure, malpractice insurance is underwritten to comply with state laws. Insurers will have to develop new products to cover physicians who cross state lines via telemedicine which will address the legal and customary practice issues in distant geographical locations. Also, insurance territorial rating questions may need to be addressed as experience is gained about claims arising from this new treatment modality.

"Currently, the degree of accountability for individual practitioners and jurisdictional issues are questions without answers," said Ms. Bartholomew. "We are working to answer these concerns before the full potential of this technology is developed."

Copies of the booklet *Telemedicine: An Overview of Applications and Barriers* are available from the PIAA at 2275 Research Boulevard, Suite 250, Rockville, MD, 20850, (301) 947-9000. J

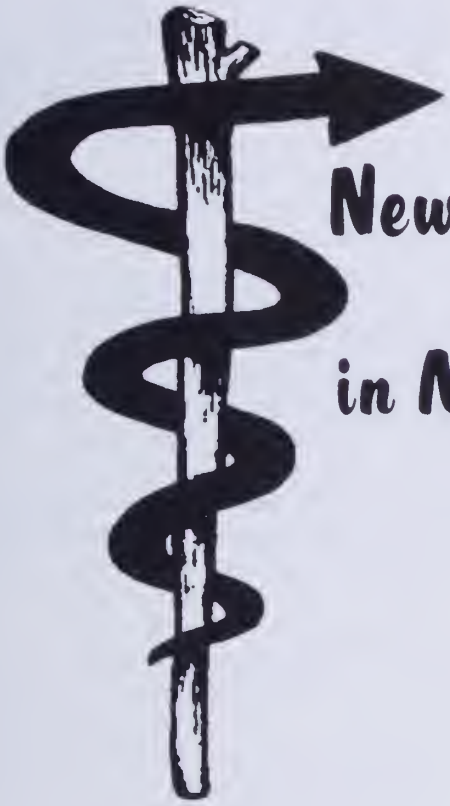
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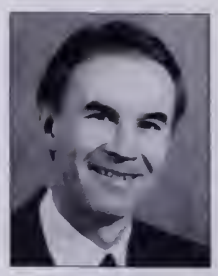
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April 25-27, 1997

Invitation from the Presidents



Dear OSMA Member:

The 91st Annual Meeting of the Oklahoma State Medical Association is scheduled for April 25-27, 1997, at the Southern Hills Marriott in Tulsa, Oklahoma. We invite you to be a part of this timely meeting which will focus on the theme "New Directions in Medicine." Change is all around us — in and outside the health care delivery system. Our challenge today is to recognize change as an opportunity. We need to anticipate change and make it work for us instead of against us.

As you review this booklet, I know you will find several items of interest to you and your practice. Each day offers a variety of OSMA business meetings, medical education sessions, and social functions. Our Friday luncheon will feature Oklahoma's First Lady, Cathy Keating, who will discuss aspects of several key health issues of interest to her and all Oklahomans. Friday night, OSMA and the OU Alumni Association will provide an "Opening Night Gala" for all annual meeting attendees. Saturday will be devoted to several CME courses and programs provided by the OSMA and a number of specialty societies. Some 50 exhibitors will be on site to display their products and services. They are an integral part of our meeting and it is an excellent way to find out about resources that can assist your practice. Saturday night is the traditional OSMA Presidents' Inaugural Dinner. I hope you will make plans to attend and support the incoming OSMA President, David Selby, MD, and the incoming OSMAA President, Mrs. Jodie Edge.

It has been a pleasure serving as your elected president for 1996-1997, and I invite you to join your colleagues by registering for the 1997 OSMA Annual Meeting. We are truly excited about the "New Directions" of the OSMA and we entreat you to be a vital part of our endeavors.

David L. Harper, MD, OSMA President



Dear OSMA Alliance Member:

You are invited to attend the Annual Meeting of the OSMA Alliance in Tulsa on April 25-26, 1997. Diane Chow, the AMAA secretary, and an officer from the Southern Medical Alliance will be our honored guests. The Alliance is changing the format for its meetings so it will be more convenient for you to attend.

On Friday at 9:00 am, the board will convene for a pre-convention meeting. The luncheon speaker on Friday will be Cathy Keating, Oklahoma's First Lady, who will discuss health issues. Friday afternoon, there will be time for shopping, visiting the Showhouse, or touring the Philbrook Museum. As requested by our membership, we will again hold a "High Tea" in a Tulsa Alliance member's home around 4:00 pm on Friday. Saturday morning at 7:30 there will be a breakfast for all the past state presidents and a breakfast meeting for the county presidents and county presidents-elect to visit personally and share ideas with Diane Chow, the AMAA secretary. At 9:00 am, the OSMAA House of Delegates will convene. After a joint luncheon with the OSMA, Doris Edge will be presiding over the post-convention board meeting. I hope you will plan to attend the Inaugural Dinner on Saturday evening to support the new Alliance president, Doris Edge, and the new OSMA president, David Selby, MD.

Look for further details in the Alliance newsletter and I hope to see you in Tulsa.

Barbara Jett, OSMAA President

91st OSMA Annual Meeting
Tentative Meeting Schedule

Thursday, April 24, 1997

10:00 am OSMA/Alliance Registration
10:30 am OSMA Executive Committee Meeting
Noon OSMA Executive Committee/Board Luncheon
1:30 pm OSMA Board of Trustees Meeting
2:00 pm PLICO Allied Health Personnel Loss Prevention Seminar
6:00 pm Women in Medicine Reception

Friday, April 25, 1997

7:00 am OSMA/Alliance/OU Alumni Registration
7:30 am OSMA Org. Med. Staff Section Breakfast
7:30 am Tulsa Co. Med. Society Caucus & Breakfast
7:30 am Okla. Co. Med. Society Caucus & Breakfast
7:30 am Rural Co. Med. Society Caucus & Breakfast
7:30 am Credentialing for HOD Begins
8:00 am Exhibits & AMA-ERF Silent Auct. open
8:30 am OSMA House of Delegates Opening Session
9:00 am Alliance Pre-Convention Board Meeting
11:45 am OSMA/Alliance/Exhibitor Luncheon — Speaker, First Lady Cathy Keating
1:30 pm OSMA Candidates' Forum
2:30 pm OSMA Reference Committees
4:00 pm Alliance "High Tea"
6:00 pm Oklahoma Surgical Association Party
6:00 pm Opening Night "Gala" (OU Alumni, OSMA, Alliance, and Exhibitors)
- 6:00 pm Reception
- 7:00 pm Medical Alumni Assn., University of Oklahoma Annual Dinner
- 8:30 pm Evening Cordials & Cotillion (Buddy Billen Band)
- 9:00 pm Medical Alumni Assn., University of Oklahoma Reunions (Classes of 1952,'57, '67, '72, '77, '82, '87 & '92)

Saturday, April 26, 1997

7:00 am OSMA/Alliance Registration
7:00 am Oklahoma Surgical Assn. Council Breakfast
7:00 am OSMA Past State, County Soc., & Specialty Soc. Presidents' Breakfast
7:30 am Alliance State Past Presidents' Breakfast
7:30 am Alliance Co. Soc. Presidents' and Co. Soc. Presidents'-Elect Breakfast
7:30 am OSMA Council on Rural Health Breakfast
8:00 am Exhibits & AMA-ERF Silent Auct. open
8:00 am CME Session — Physicians Accessing the Internet
8:30 am CME Session — Health Insurance Portability and Accountability Act of 1996 presented by the law firm of Crowe & Dunlevy and the State of the State's Health presented by Dr. Gordon Deckert
9:00 am Alliance House of Delegates
9:30 am Okla. Society of Anesthesiologists Lectures
10:00 am Medical Alumni Association, University of Oklahoma, Board Meeting
11:00 am Physical Medicine and Rehabilitation Soc. Luncheon & Meeting
11:00 am Okla. State Orthopedic Society Luncheon & Meeting
11:00 am Golf Tournament - Forest Ridge Golf Club
Noon OSMA/Alliance/Exhibitor Luncheon
Noon Okla. Surgical Assn. Luncheon & Meeting
12:45 pm AMA-ERF Silent Auction winners and other prize winners announced
1:00 pm CME Session — Physicians Accessing the Internet *(Repeat of morning session)*
1:00 pm Okla. Soc. of Anesthesiologists Luncheon
2:00 pm Exhibits close
2:00 pm Okla. Soc. of Anesthesiologists Meeting
2:00 pm OMPAC Meeting
2:00 pm PLICO Loss Prevention Seminar — Placenta Study
2:30 pm Alliance Post-Convention Board Meeting
3:00 pm OSMA Coun. on Governmental Activities
3:00 pm PLICO Loss Prevention Seminar — Professional Liability in Managed Care
6:00 pm OSMA/OSMAA Presidents' Reception
7:00 pm OSMA/OSMAA Presidents' Inaugural Banquet *(Black Tie Optional)*

Sunday, April 27, 1997

6:30 am Credentialing for HOD Begins
7:00 am Voting Room Open
7:00 am OSMA Registration
7:30 am Tulsa Co. Med. Soc. Caucus & Breakfast
7:30 am Okla. Co. Med. Soc. Caucus & Breakfast
7:30 am Rural Co. Med. Soc. Caucus & Breakfast
9:00 am OSMA House of Delegates Closing Session
Noon New OSMA Officers, Trustees, and AMA Delegates Luncheon*
1:30 pm AMA Delegation Caucus*
1:30 pm PLICO Forum*

*Beginning time subject to the ending of the House of Delegates Closing Session.

New Directions in Medicine

91st OSMA Annual Meeting

➡ Target Audience

The OSMA Annual Meeting is designed primarily for Oklahoma physicians concerned with health care issues that affect the practice of medicine. Clinic managers, medical students, residents, and other health care professionals will also benefit from many of the activities during the course of the meeting. Also, the University of Oklahoma Medical Alumni are welcome to attend any of the general events.

➡ CME Hours

The OU College of Medicine, Irwin Brown Office of Continuing Medical Education is nationally accredited through the Accreditation Council for Continuing Medical Education (ACCME) to sponsor continuing medical education for physicians. On Saturday morning, the law firm of Crowe & Dunlevy will be presenting a program on the physician impact of the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"). Also, Dr. Gordon Deckert will speak on the "State of the State's Health - Where are we and where can we go?" The Irwin Brown Office of Continuing Medical Education designates this CME activity for 3.0 credit hours of Category 1 for the Physician's Recognition Award (PRA) of the American Medical Association. *(Please register using the form provided)*

The AMA has graciously provided the OSMA with a partial grant to present the Physicians Accessing the Internet (PAI) Course for physicians. The Internet, and in particular, the World Wide Web, is emerging as a fantastic new source of information and communication for health care professionals. This hands-on workshop will introduce you to the Internet and provide you with the skills you need to use it effectively. PAI will provide 15 computers which will accomodate 30 participants per workshop. Each workshop will be four (4) hours in length. Two workshops will be held on Saturday, April 26th — one in the morning and one in the afternoon. Teaching materials will be provided. *(Please register using the form provided.)*

➡ Business Meetings

The Oklahoma State Medical Association House of Delegates, legislative and policy-making body of the association, will meet on Friday, April 25, and Sunday, April 27, during the Annual Meeting. The house is made up of delegates from county medical societies and elected leaders. All OSMA members are invited and encouraged to participate in discussion of OSMA policies. *However, only delegates, or alternates seated as delegates, may vote in the house.* Grass roots resolutions have gone from the OSMA House to the AMA and on to Washington, DC, to shape national public policy.

Reference Committee meetings will convene Friday afternoon, April 25. Each committee is comprised of a small group of delegates and the meetings are an open forum to discuss the current issues brought before the House of Delegates. Any OSMA member may participate by testifying at these committee meetings. The committee then makes recommendations to the House regarding the business referred to it. Registrants are encouraged to attend the committee meetings and the house sessions to see firsthand how OSMA policies are developed.

➡ PLICO Programs

Allied Health: A special loss prevention seminar designed by PLICO to assist allied health care personnel, especially physician office staff, to avoid professional liability situations and to help "malpractice proof" the medical office is scheduled for Thursday, April 24. All persons with direct patient contact are encouraged to attend. *However, only allied health personnel will receive credit for attending this particular PLICO seminar.*

Placenta Study: Oklahoma's placenta study project to assist physicians involved in "bad baby" cases has now been ongoing for several years. A recent report indicates that the study resulted in the favorable resolution of many such cases in the physician's favor. This seminar scheduled for Saturday, April 26, is recommended for all physicians who practice obstetrics.

General Program: This is a special PLICO loss prevention seminar of interest to all physicians. It will cover a range of topics and types of malpractice lawsuits, and will offer advice and information on how physicians can "malpractice proof" their practices. This seminar, scheduled for Saturday, April 26, is of general interest and is recommended for those not attending the **Placenta Study** seminar.

91st OSMA Annual Meeting

➦Specialty Society Meetings

Several specialty societies will be holding meetings in conjunction with the OSMA Annual Meeting. The **Oklahoma Surgical Association** will have a breakfast meeting Saturday morning, April 26, 1997. The **Oklahoma Society of Anesthesiologists** will have lectures, a luncheon, and a business meeting on Saturday, April 26, 1997. The **Physical Medicine and Rehabilitation Society** will have a luncheon meeting on Saturday, April 26, 1997. The **Oklahoma State Orthopaedic Society** will also have a luncheon and meeting on Saturday, April 26, 1997.

➦Social Events

"Opening Night Gala" — On Friday evening the OSMA and the Medical Alumni Association, University of Oklahoma, will present a "Welcome" reception for all the annual meeting attendees. Immediately following the reception will be the Medical Alumni Association, University of Oklahoma Annual Dinner honoring the Physician of the Year in Academic Medicine, Dr. Gordon H. Deckert and the Physician of the Year in Private Practice, Dr. Norman A. Cotner. Evening cordials and cotillion will follow with the Buddy Billen Band providing the music. The alumni class reunions will also take place after the dinner. *(Note: Anyone may attend the reception, cordials and cotillion, however a ticket is required to be admitted to the dinner.)*



Presidents' Inaugural Reception & Banquet — The evening will begin with a reception honoring the outgoing and incoming presidents of the OSMA and the OSMA Alliance. Join us for a fabulous dinner and the joint installation of David Selby, MD, as OSMA president and Mrs. Jodie Edge as OSMA Alliance president. *(Ticket required to be admitted.)*

➦Exhibitors

The exhibitors play an important role in both the educational aspects and the financial support of the Annual Meeting. Make plans in your annual meeting schedule to visit with the exhibitors on Friday, April 25, 1997, between 8:00 am and 5:00 pm and Saturday, April 26, 1997, between 8:00 am and 2:00 pm. This preliminary listing includes only the exhibitors and/or sponsors registered at press time:

Autoflex Leasing
Baylor Institute for Rehabilitation
Business Imaging Systems
C.L. Frates and Company
CibaGeneva Pharmaceuticals
Columbia Healthcare of Oklahoma
Cornerstone Resources
Family Hospice
Harris, Kovacs, Alderman & Assoc.
Harrison Peck Associates, PC
Health Management Associates, Inc.
Home Health Services, Inc.
Hospital Discount Pharmacy
I.C. System, Inc.
Merck Human Health
Miller, Dollarhide, Dawson & Shaw
Northeast Okla. Rehab. Hospital
NovaCare Outpatient
Oklahoma Assn. for Home Care, Inc.
Oklahoma Centralized Verif. Org. (OCVO)
Oklahoma Foundation for Medical Quality
Oklahoma State and Education Employees Group Ins. Board/HealthChoice (EGIP)
Option Care of Tulsa
Organon Inc.
OSMA Alliance Silent Auction
Pfizer Lab
Physician Manpower Training Comm.
Radiology Group, Inc.
Roerig Division, Pfizer Inc.
Schering Oncology-Biotech
SmithKline Beecham Pharmaceuticals
Spine Diagnostic Group
St. Anthony Hospital
Stillwater National Bank of Okla. City
Sundance Rehabilitation Corporation
UCB Pharma, Inc.
Univ. of Ok. Health Sciences Libraries
U.S. Army Medical Department
Vencor Hospital - Oklahoma City
WPS, Inc.
Wyeth-Ayerst

➦AMA-ERF Silent Auction

Make sure and visit the OSMA Alliance booth to place your bids on wonderful and unique items. Your donation will benefit the American Medical Association Education & Research Foundation (AMA-ERF). The winners will be announced on Saturday during the luncheon.

➦Prizes!

Watch for the prize drawing entry card in the Annual Meeting program and deposit it in the specially marked box in the exhibit hall to win prizes. The recipients' names will be drawn from all entries on Saturday at 12:45 p.m.

Important Information

Meeting Registration . . .

Return your meeting registration form by April 15, 1997, with a check for the applicable items (sorry, no credit cards), made payable to the Oklahoma State Medical Association or OSMA:



Attn: Annual Meeting Coordinator
Oklahoma State Medical Association
601 W. I-44 Service Road
Oklahoma City, OK 73118-6073



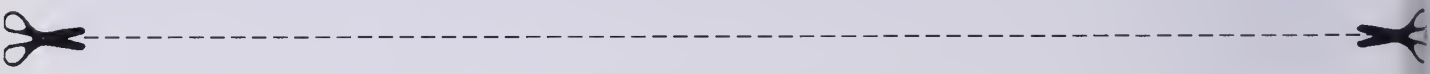
Refunds prior to April 15, 1997, will be at the full amount. Refunds after April 15, 1997, will be charged a $10.00 processing fee which will be mailed after the meeting. *Submit your registration form prior to April 15, 1997, and your name will be placed in a drawing for a prize to be announced on Saturday, April 26.*

Meeting Attire . . .

General sessions, educational programs, and other daytime activities — business attire, but dress comfortably. Opening Night "Gala" — business attire. Presidents' Inaugural Banquet — black tie optional.

Hotel Reservations . . .

The Southern Hills Marriott has recently completed a two million dollar renovation. They have completely redecorated all of the guest rooms providing a "Room that Works" which features a desk within a desk work station, ergonomic desk chair, adjustable task lighting and dataport jack, new furniture, carpeting, drapes, and bedspreads. A state of the art phone system has also been installed which includes individual voice mail in each room. ***Hotel reservations must be made directly with the Southern Hills Marriott by April 3, 1997.*** After that date, OSMA meeting rates cannot be guaranteed. For your convenience, a registration form is provided below to be mailed directly to the hotel.



TULSA Marriott. SOUTHERN HILLS

1902 EAST 71ST STREET, TULSA, OK 74136-5477 PHONE (918) 493-7000 FAX (918) 481-7147

Oklahoma State Medical Association
Annual Meeting

	1 Person	2 People	3 People	4 People
RATES	$69	$69	$79	$79

All reservations are subject to cancellation after 6 p.m. unless a deposit or credit card number are received to guarantee. Guaranteed reservations can be cancelled up to 6:00 p.m. day of arrival. If guest does not arrive or does not cancel a guaranteed reservation, the guest will be charged 1 night's room and tax. Reservations will be accepted until the group block is filled or until the cut-off date specified, whichever comes first. After that date, rooms not reserved will revert to hotel for general sale, and requests will be taken on a space availability basis.

Reservations must be received by April 3, 1997

CHECK IN TIME - 3:00 P.M.
CHECK OUT TIME - 12:00 NOON

WILL ARRIVE	WILL DEPART
DATE __/__/__ TIME _____ A M / P M	DATE __/__/__ TIME _____ A M / P M

Total no. of people in room _____

Last Name First Name

Company Name

Street Address or P. O. Box Number

City State Zip Code

Area Code Phone Number Honored Guest Award Number

METHOD of PAYMENT

_____ American Express _____ Bank Card
_____ Diners Club _____ Discover
_____ Other _____

BASED on AVAILABILITY.

- ☐ King Bed or
- ☐ 2 Double Beds
- ☐ Accessible
- ☐ Smoking
- ☐ Non-Smoking

Credit Card Number Expiration Date

Annual Meeting Registration

1997 Annual Meeting of the Oklahoma State Medical Association and OSMA Alliance
April 25-27, 1997, Southern Hills Marriott, Tulsa, Oklahoma

Name _____ ☐ Delegate ☐ Alternate Delegate (Please check)

Spouse (if attending) _____ Guest _____

Telephone Number _____ Fax Number _____

Street _____

City _____ State _____ Zip _____

Reservations for Events and Meetings

Reservation deadline is April 15, 1997. The items listed below are only the events the OSMA needs to track for set-up and costs. Even if you do not plan to attend any of the functions listed below, please submit this registration form so a name badge may be prepared for you. **There is no "Registration Fee" for the meeting.** If there is something you plan to attend that is not listed, please notify the group sponsoring the event to make your reservation.

As a member you may attend many of the events at "no charge." Please indicate the number of physicians, spouses, and guests attending each function so we can be cost efficient with food/beverage orders. *Note: Tickets will be held at the OSMA/OSMAA registration desk to be picked up when you arrrive at the Marriott. Your ticket must be presented to enter the event (and to obtain one free drink at each reception; extra drinks will be provided by a "cash" bar).*

Thursday, April 24, 1997

Noon	OSMA Executive Committee/Board Luncheon	No Charge	# attending _____

Friday, April 25, 1997

7:00 am	Registration	No Charge	# attending _____
7:30 am	OSMA Organized Medical Staff Section Breakfast	No Charge	# attending _____
7:30 am	Rural County Medical Societies Caucus & Breakfast	No Charge	# attending _____
Noon	OSMA/Alliance/Exhibitor Luncheon — First Lady Cathy Keating)	$ 25.00 each	# attending _____
6:00 pm	Opening Night "Welcome" event *(Includes one drink at "Welcome" Reception, OU Alumni Dinner, and Cordials & Cotillion)*	$ 50.00 each	# attending _____

Saturday, April 26, 1997

7:00 am	OSMA Past State, County Society, & Specialty Society Presidents' Breakfast	No Charge	# attending _____
7:30 am	Alliance Past Presidents' Breakfast	No Charge	# attending _____
7:30 am	Alliance County Society Presidents'/Presidents'-Elect Breakfast	No Charge	# attending _____
7:30 am	OSMA Council on Rural Health Breakfast	No Charge	# attending _____
8:00 am-Noon	CME Session — Physicians Accessing the Internet *(Limited to 30 attendees)*	$ 25.00 each	# attending _____
8:30-11:30 am	CME Session — Crowe & Dunley and Dr. Gordon Deckert	$ 50.00 each	# attending _____
11:00 am	Golf Tournament *(Contact Tulsa County Medical Society, 918-743-6184)*		
Noon	OSMA/Alliance/Exhibitor Luncheon	$ 15.00 each	# attending _____
1:00-5:00 pm	CME Session — Physicians Accessing the Internet *(Limited to 30 attendees) (Repeat of Morning Session)*	$ 25.00 each	# attending _____
6:00 pm	Presidents' Inaugural Reception & Banquet *(Includes one drink at OSMA/OSMAA Reception and Dinner)*	$ 50.00 each	# attending _____

Sunday, April 27, 1997

7:30 am	Rural County Medical Societies Caucus & Breakfast	No Charge	# attending _____

Total enclosed for non-complimentary and/or additional reservations $ _____ Check #_____/Cash

After completing this form, please mail it to us at 601 W. I-44 Service Road, Oklahoma City, OK 73118-6073. If you have any questions, contact Toni Farrar of the OSMA offices at (405) 843-9571 or (800) 522-9452. ***Submit this form prior to April 15, 1997, and your name will be placed in a drawing for a prize to be announced on Saturday, April 26!***

Sponsors and exhibitors are indispensable for successful meeting

Each year exhibitors and sponsors play a major role in the success of the Annual Meeting of OSMA's House of Delegates, and this year's meeting will be no different.

At presstime, the following organizations had requested booths at the meeting and all available space had been filled. When you attend the meeting, stop by the exhibits, make the representatives feel welcome, and thank them for helping to make your meeting possible. A list of this year's exhibitors follows:

A Rx Solutions, Inc.
Administration Service Corporation
AeroCare Medical Transport, Inc.
American Transitional Hospitals
Autoflex Leasing
Baylor Institute for Rehabilitation
Business Imaging Systems
C.L. Frates and Company
CibaGeneva Pharmaceuticals
Columbia Healthcare of Oklahoma
Cornerstone Resources
Electronic Dictation of Oklahoma City, Inc.
Family Hospice
Feed the Children
Harrison Peck Associates, PC
Health Management Associates, Inc.
Home Health Services, Inc.
Hospital Discount Pharmacy
Laboratory Supply Company
LDS Communications
Merck Human Health
Merck Vaccine Division
Northeast Oklahoma Rehabilitation Hospital



NovaCare Outpatient
Oklahoma Association for Home Care, Inc.
Oklahoma Centralized Verification Organization
Oklahoma Foundation for Medical Quality, Inc.
Oklahoma State and Education Employees Group Insurance Board/HealthChoice (EGIP)
Option Care of Tulsa
Organon Inc.
OSMA Alliance (Silent Auction)
Pfizer Lab
PhyMatric Corp.
Physician Manpower Training Commission
Radiology Group, Inc., Spine Diagnostic Group
Roerig Division, Pfizer Inc.
Schering Oncology—Biotech
SmithKline Beecham Pharmaceuticals
Sprint PCS
St. Anthony
Stillwater National Bank of Oklahoma City
Sundance Rehabilitation Corporation
U.S. Army Medical Department
UCB Pharma, Inc.
University of Oklahoma Health Sciences Libraries
Vencor Hospital, Oklahoma City
WPS, Inc.
Wyeth-Ayerst

This year's Annual Meeting sponsors, and the events they are sponsoring, are as follows:

I.C. System, Inc.—*Hospitality all day Friday*
Merck Human Health—*Friday's luncheon speaker, Cathy Keating*
Merck Vaccine Division—*Opening Night Gala*
Miller, Dollarhide, Dawson & Shaw—*House of Delegates Opening Session refreshments*
Wyeth-Ayerst—*Hospitality all day Saturday*

LETTERS

CME requirements draw comment

To the Editor: To whom at the OSMA should the "thank you" note be addressed when the rural physician (who has difficulty getting coverage for weekends, much less time off for CME excursions) having accumulated 149 hours of CME after three years, loses his license? Perhaps the note will come from a patient and will say something like this: "...as a result of your efforts to insure that my physician 'keep up with the latest,' you have denied me and the entire community access to the services of this physician or any other."

It appears that OSMA is copying the AMA's battlefield tactic of "rushing in for the compromise," so well depicted by the nobles in the movie *Braveheart.* If physicians in Oklahoma wish to practice medicine without the intervention of the government, which position should the leadership take? One of compromise or one of principle? My bet is that the Oklahoma legislature, like a shark, senses not a worthy opponent, but rather a trace of blood in the water. Will they leave us alone or move in for the kill? Have the actions of the AMA leadership over the last 15 years (the reign of compromise) rendered the government more or less likely to initiate control over the practice of medicine in the United States?

—G. Keith Smith, MD
Oklahoma City

The AMA Physician's Recognition Award— A Tool for Your Education, Efficiency, and Success

By Roger E. Sheldon, MD, MPH

The Physician's Recognition Award of the American Medical Association (AMA-PRA) is a poorly understood and underutilized certification showing that a physician has completed a commendable amount of continuing medical education (CME) during the last 1, 2, or 3 years. Many different activities can earn credit toward the PRA—everything from full-scale designated CME courses to consulting with a colleague, analyzing your patients using a computer database, or reading "authoritative medical literature" in the comfort of your home or office. A number of options are available to every doctor, and every doctor should be able to earn a PRA.

Most Oklahoma MDs (and most across the country) have not taken the time to record their credits and file the simple PRA application. But trends are afoot which will probably increase our interest and participation—perhaps to nearly 100%. Most hospitals, managed-care organizations, and other health contractors are asking about CME hours and other CME activities. Physician databases (including the AMA "Physician Select" World Wide Web site (which probably already lists you along with your educational background) are already noting (in flashing symbols) that you have earned a PRA. More and more, the public is looking into these databases when selecting a physician.

Finally, and most importantly, a rule was recently passed by the Oklahoma State Board of Medical Licensure and Supervision—at the request of the OSMA House of Delegates—which, when ratified by the governor and legislature, will require 50 hours of CME annually, including 20 hours in Category 1, for renewal of your medical license. Thanks to the action of the House of Delegates, and to Dr. Jay Gregory's leadership, we have an exemplary, flexible regulation with lots of doctor input in its development, as well as many ways of reaching our goal of up-to-date CME for all physicians and easy reporting and tracking of these credits.

The PRA will be your easiest and smoothest way to document the CME necessary for all these purposes.

The AMA-PRA combines all sorts of credits into one unified credential recognizing AMA Categories 1 and 2, American Academy of Family Physicians prescribed hours, American College of Obstetricians and Gynecologists cognates, and



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AMA PRA Award *(continued)*

independent credit hours of 9 other specialties and 5 local medical associations. Thus it provides a single certificate with which a physician may document CME for 1, 2, or 3 years.

So What Do You Need to Know About the PRA?

Some basic requirements apply:

periences must comply with the AMA definition of CME. (Content must relate *directly* to physicians' *professional* responsibilities.)

• All learning experiences must comply with AMA ethical opinions on Gifts to Physicians from Industry and on Ethical Issues in CME.

• Physicians must read authoritative medical literature an average of 2 hours per week.

The AMA, in keeping with its goal of making the PRA a recognition of physician-driven, comprehensive programs of education, recognizes most educational activities that individual physicians think are helpful to them. While most doctors claim mostly Category 1 hours from conventional CME meetings, Category 1 and 2 hours are available in many other ways. These include:

Category 1

- Formal CME activities (can be designated as either Category 1 or 2 by accredited providers).
- Journal-based CME (specific accredited articles with mail-in tests or evaluations).
- Accredited enduring materials (printed, audio- or videotape, computer-assisted programs, videodiscs, CD-ROMs). If a program of this sort is not designated for Category 1 hours, you may still be able to claim it as Category 2.
- Reciprocity with other medical education certificates.
- International meetings as approved and documented by the AMA.
- Recertification by an ABMS specialty board (a three-year PRA is granted).
- Full or part-time participation in an approved residency program (up to 50 hours of Category 1 per year).
- Study leading to medically related degrees (like the MPH or healthcare administration degrees).
- "Other meritorious learning experiences" as approved by the AMA.

Category 2 (largely physician-designated)

- Consultation with peers and experts concerning patients
- Use of electronic databases in patient care
- Small group discussions
- Self-assessment activities
- Journal club activities not designated as Category 1
- Medical writing
- Teleconferences
- Preceptorships
- Participating in formal peer review and quality assurance activities
- Preparation of educational exhibits
- Formal learning activities not designated as Category 1 or Category 2

Because of all these options and the physician-designated nature of Category 2, most physicians will find it easy to claim Category 2 hours. Category 1 may be harder for rural physicians, but more and more self-study offerings are becoming available, and Internet-based Category 1 is just around the corner. The *New England Journal of Medicine* offers up to 100 hours per year of Category 1 by reading designated articles and completing tests during the year. Other journals are following suit.

Two different PRA certificates are now available. The Standard Award requires 20 hours of Category 1 and a total of 50 hours per year. The "other" 30 hours can be either Category 1 or Category 2. In other words, "Category 2 hours, while highly recommended, are not required."

Strong support for truly self-directed learning led to the creation of a second type of certificate. This "PRA with Commendation for Self-directed Learning" can be earned by physicians who determine their own learning needs relating to their professional responsibilities using a comprehensive program of self assessment and personally tailored CME of many types. It requires at least 20 hours of Category 1 *and* at least 20 hours of Category 2, again with a total requirement of 50 hours annually. Reading of authoritative medical literature is reportable hour-by-hour as Category 2 for the standard PRA, but *not* for the PRA with commendation. Applicants for both PRAs are required to affirm that they read the literature two hours per week on average.

More About the PRA

Details concerning all the provisions of the PRA are contained in the AMA-PRA Information Booklet (dated January, 1997). You can get your copy and a PRA application form by calling the AMA at (312) 464-4665, by writing the PRA office at 515 North State Street, Chicago, Illinois 60610, or by accessing the AMA or OSMA home pages on the World Wide Web, <http://www.ama-assn.org> or <http://www.osmaonline.org>, and clicking to the CME page. The booklets are also available by calling Barbara Matthews at the OSMA, (405) 843-9571, 1-800-522-9452, or fax (405) 842-1834. Authoritative answers to questions about PRA requirements and the whole credit system are available at (312) 464-4665. The PRA fax number is (312) 464-4567.

How to Get Your Hospital Accredited to Provide CME for Credit

In addition to the Irwin H. Brown Office of Continuing Medical Education at the OU College of Medicine, 13 hospitals are now accredited by OSMA to designate Category 1 CME. Many on-going conferences and grand rounds at the University and other hospitals are designated as Category 1. More hospitals will probably want to provide this service to their medical staffs. For information on becoming an accredited provider of CME, please contact Barbara Matthews at OSMA Headquarters. A pre-survey of a hospital's readiness to apply

will be sent free of charge. If the readiness survey is satisfactory, an application will be sent, followed by a site survey of the facility.

Dr. Sheldon is Professor of Pediatrics and Assistant Dean for Continuing Medical Education at the Irwin H. Brown Office of Continuing Medical Education at the OU College of Medicine, and Chair of the Accreditation Committee, Education Council, OSMA

Accredited Oklahoma Hospitals

Bartlesville
Jane Phillips Episcopal Memorial Medical Center

Duncan
Duncan Regional Hospital

Oklahoma City
Baptist Medical Center
Deaconess Hospital
Institute for Mental Health, Education and Training
Mercy Health Center
Presbyterian Hospital
Southwest Medical Center of Oklahoma
St. Anthony Hospital

Stillwater
Stillwater Medical Center

Tulsa
Hillcrest Medical Center
Saint Francis Hospital
St. John Medical Center

OSMA CME Preliminary Questionnaire

The following statements on the OSMA's preliminary questionnaire for CME accreditation describe CME programming. The CME planner is to respond *Yes, No,* or *N/A*. Any *No* reply indicates the institution is probably not ready to complete the accreditation application.

1. For at least 6 months we have offered a CME program, trying to comply with the requirements of the OSMA Essentials for CME Accreditation. We now offer (or plan to offer) CME programming each year that we believe would merit designation as Category 1 credit if we were accredited.
2. Responsibility for planning and directing our CME activities has been formally assigned to the individual signing this Preliminary Questionnaire.
3. We have a definite budget established for our CME activities.
4. We have a systematic procedure for specifying the audience(s) served by our CME activities.
5. We have developed systematic procedures for assessing the learning needs of the specified audience(s).
6. We have formally adopted a mission statement which describes the nature and overall goals of our CME program. (If *Yes*, include date of formal adoption.)
7. For each formal learning activity, we formulate learning objectives in behavioral terms.
8. We have devised systematic plans to assess the degree to which specific learning objectives have been achieved.
9. We systematically ask program participants to offer their opinions of program quality by means of an audience reaction form.
10. We have in place a system to record permanently CME credit earned by participants and to issue a copy of that permanent record periodically to each participant when requested.

How to reach your
OKLAHOMA STATE MEDICAL ASSOCIATION
601 West I-44 Expressway
Oklahoma City, OK 73118-6073
1-405-843-9571 • 1-800-522-9452
Fax: 1-405-842-1834 • E-mail: osma@ionet.net
Website: www.osmaonline.org

THE GREAT SEAL OF THE CHICKASAW NATION

A Tradition of Caring –
Chickasaw Nation Health System

Are you interested in no longer dealing with billing, collecting, overhead and the complexities of managed care? Our primary objective is to provide comprehensive care, promoting wellness among the American Indian families we serve.

The Chickasaw Nation Health System has opportunities for full-time employed physicians who specialize in Internal Medicine, General Surgery, Gastroenterology, or Rheumatology. Carl Albert Indian Health Facility, in Ada, Oklahoma, is a JCAHO-accredited facility, which provides an excellent working environment with competitive salaries, a generous benefits package and retention program for physicians.

The hospital is no longer an Indian Health Service facility, but is now managed by the Chickasaw Tribe. Great strides are being made to provide high quality care. This 53-bed facility has a large outpatient service and a defined population of over 30,000 patients. This progressive health system is constantly enhancing services, utilizing new technology and stressing continuing education.

Please call Jamie Spence, Professional Recruiter 800-851-9136 or fax resume to 405-421-4512.

HEALTH DEPARTMENT

A 1997 Mother's Day message for your patients: "Folic Acid—Make It a Habit"

May 1997, the Oklahoma State Department of Health, March of Dimes Birth Defects Foundation, and the Oklahoma Pharmacists Association will launch a campaign to prevent neural tube defects using Mother's Day as the theme. In 1992, the U.S. Public Health Service (PHS) issued a recommendation for all women of child-bearing age (teens to 40s) who are capable of becoming pregnant to consume 0.4 milligrams (400 micrograms) of folic acid per day.[1] The daily consumption throughout childbearing years is critical, because half of all pregnancies are unplanned, and the neural tube forms before most women realize they are pregnant. Unfortunately, few child-bearing-age women are aware of the PHS recommendation.

A recent article in *The Lancet* compared the effectiveness of folic acid supplements, fortified food, and natural food folate at increasing red cell folate status.[2] Each group received 400 mcg/day from the various sources. Folic acid supplements and fortified food increased folate status among participants, while natural food folate was relatively ineffective.



The researchers concluded that advice to women to consume folate-rich foods as a means to improve folate status is misleading. The prudent message is that women need to consume folic acid from both multivitamins and natural foods.

All physicians throughout the state are invited to join our efforts and help spread the following message: all Oklahoma women throughout their childbearing years should make it a part of their *daily routine* to take a multivitamin containing 0.4 mg (400 micrograms) of folic acid and eat foods high in folate. Posters and special educational Mother's Day cards have been developed around the theme: Happy Mothers Day, Folic Acid—Make It a Habit. If you would like to order free posters and cards for your office call 1-800-766-2223. Supplies are limited, so order soon. J

References

1. Centers for Disease Control. Recommendation for the use of folic acid to reduce the number of cases of spina bifida and other neural tube defects. *MMWR* 1992; 41:No. RR-14.
2. Cuskelly GJ, et al. Effect of increasing dietary folate on red-cell folate: implications for prevention of neural tube defects. *The Lancet* 1996; 347: 657-658.

Do not wait for little matters to become big problems.

For assistance with

Civil / Medical Defense,
Real Estate Law, &
Immigration Law

Call:

Farzaneh Law Firm, P.C.
Tel: (405)-USA-1LAW

SIDS in Oklahoma down 40% in last five years

Oklahoma's 1996 data represent a five-year decline of 39.8% in sudden infant death syndrome (SIDS) and 29.5% decrease since 1993 (Fig. 1). These data are reported by the Oklahoma State Department of Health's SIDS Program and are received from the Oklahoma State Medical Examiner's Office. The 24-month period between October 1993 and October 1995 witnessed a 30% decline in SIDS in the United States. According to Dr. Duane Alexander, director of the National Institute of Child Health and Human Development (NICHD), "the reduction in SIDS amounts to approximately 30% since the announcement of the American Academy of Pediatrics recommendation in 1992 and the beginning of the Back To Sleep campaign in 1994."[1]

The Back To Sleep campaign, sponsored by several professional groups including NICHD and the American Academy of Pediatrics (AAP), emphasizes the supine position (on the back) as the preferred sleeping position for infants. The 70% of babies placed on their stomachs to sleep in 1992 (prior to the Back To Sleep campaign) has dropped to 24% in 1996 (NICHD data).[2] Although the exact causes of SIDS is unclear, research has indicated that sleeping prone is a risk factor and the decrease in the SIDS rate may be associated with the change in sleeping positions.

The precise link between SIDS and sleeping prone is still being investigated. One theory related to sleeping position asserts that rebreathing exhaled carbon dioxide may be one of the causes of SIDS. The chance of rebreathing carbon dioxide is greater in the prone position due to air becoming trapped underneath the infant or being trapped in soft or porous surfaces. According to John Kattwinkel, MD, chairperson of the AAP Task Force on Infant Positioning and SIDS, there is some evidence that SIDS associated with rebreathing exhaled air has a greater chance of occurring in infants who have developmental delays related to respiratory control and arousal.[3]

Although new evidence suggests sleeping on the side may not be as effective in preventing SIDS, it is considered a reasonable alternative to the supine position, with some precautions. The AAP Task Force[3] recommends that if infants are placed in the side sleeping position, then the child's dependent arm should be placed forward, perpendicular to the child's body, to reduce the possibility of the infant rolling to a prone position. Research in England indicates the feared complications of aspiration, problem sleeping, or behavioral complaints due to nonprone sleeping did not increase. The concern over head molding can be minimized by providing infants with "tummy time" while awake and observed.

In addition to sleeping in the supine position, the AAP Task Force[3] recommends the sleeping area of infants be free of soft bedding, pillows, or stuffed toys and not exceed 70°F. The recommendations are for healthy infants, including premature infants who are healthy and sufficiently mature, to be cared for at home. Some infants with certain medical conditions or malformations may need to be placed on their stomachs to sleep and the pediatrician or family physician should be consulted for specific recommendations. The AAP Task Force also lists maternal prenatal smoking and passive smoke in the presence of infants as SIDS risk factors. Physicians are encouraged to utilize the recommendations of the AAP Task Force when counseling new parents.

Figure 2 displays the number of Oklahoma SIDS by quarter for each of the past five years. The average number of SIDS by quarter indicates the death rate to be highest during the first quarter (Jan-Mar = 24.2, Apr-Jun = 17.4, Jul-Sep = 16.6, Oct-Dec = 17.0). This may be related a greater chance of rebreathing trapped exhaled air and possible overheating associated with an increased use of blankets during these colder months. Tightly closed homes during these cold months may also elevate the level of passive smoke within the homes of smokers.

The Oklahoma State Department of Health has promoted the Back To Sleep campaign through mailings to physicians and media releases to the public. Information on obtaining fact sheets and brochures suitable for distribution to parents of infants may be ordered through the National Institute of Child Health and Human Development 1-800-505-CRIB and the American Academy of Pediatrics by calling 1-800-433-9016 and asking for the publications division. For additional information regarding the Back To Sleep campaign in Oklahoma, contact Edd D. Rhoades, MD, MPH, or Bruce Cook, EdD, SIDS Program, (405) 271-4477, Child Health and Guidance Service, Oklahoma State Department of Health.

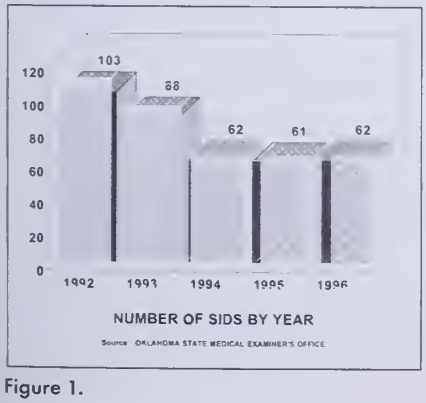


Figure 1.

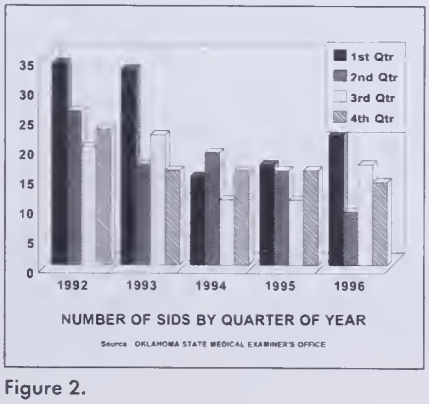


Figure 2.

References

1. *Fourth SIDS International Conference* in Bethesda, Md., as reported in the Sept. 1996 *Research Reports* from the National Institute of Child Health and Human Development.
2. Reported at the *American Academy of Pediatrics Annual Meeting* (1996) in Boston, Mass.
3. AAP Task Force presentation at the American Academy of Pediatrics Annual Meeting (1996) in Boston, Mass., as reported in *The American Academy of Pediatrics News*, Dec. 1996, Vol. 12, No. 12.

National accreditation is important to any poison control center

Poison control centers serve a great percentage of the populace of the United States, with the majority providing information 24 hours a day, 365 days a year. Populations served include the general public, emergency room physicians (as well as physicians in other specialties), other health care providers, veterinarians, law enforcement and fire officials, and many others. The primary goal of most poison centers (including the Oklahoma Poison Control Center) is to provide accurate and timely information regarding the management of potential poisoning victims. Implicit in this goal is to do so in a cost-effective fashion, thereby saving both the victim and the taxpayer unnecessary financial expenditures. Indeed, studies have shown that poison control centers can and do provide a significant financial return for every dollar invested in operating costs. while this may not seem obvious initially, the returns are generated through avoidance of unnecessary use of other medical resources such as a visit to the emergency room. In 1996 nearly 75% of callers to the Oklahoma Poison Control Center (OPCC) were managed safely at home through the use of initial telephone triage, recommendations for management at home, and appropriate follow-up. If these services had not been available, many victims would have sought treatment elsewhere, thereby incurring needless expenditures for medical care.



The American Association of Poison Control Centers (AAPCC) is an organization founded in 1958 with the goals of coordinating the efforts of poison control centers and providing education directed towards reducing the incidence and severity of poisonings. Major focuses of the AAPCC include the collection and dissemination of data regarding poisonings through the Toxic Exposure Surveillance System (TESS) and the certification of individuals and poison centers that meet nationally recognized standards of care. Individuals deemed Certified Specialists in Poison Information must be licensed health care professionals (e.g., pharmacists, nurses, or physicians), have at least one year of full-time experience providing information regarding toxic exposures, and pass a national examination. Certified regional poison control centers (as designated by the AAPCC) must meet stringent guidelines,[1] including:

1. Service to a defined geographic area, with a specified minimum and maximum population base.
2. 24-hour, 365-day-a-year service with toll-free access from throughout the region.
3. Comprehensive reference materials.
4. Written treatment protocols.
5. Working relationships with all primary receiving hospitals throughout the region, as well as with at least one analytic toxicology laboratory and the region's pre-hospital transportation system.
6. Thorough documentation of each case, and submission of these cases to the Toxic Exposure Surveillance System.
7. An established program of public and professional education.
8. Ongoing quality assurance measures for all aspects of the operation of the center.
9. Documentation of education and training of the medical director, managing director, and all employees of the center.
10. The medical director should be board certified in medical toxicology. In the absence of this, board certification in internal medicine, pediatrics, family medicine, or emergency medicine with a minimum of 50% of professional activities related to toxicology is required. Additionally, a minimum of 10 hours per week should be devoted to poison center activities.

Many other criteria must be met, and additional guidelines which may be established in the near future include on-site evaluation of centers, test calls to centers to ascertain quality of care, requiring at least 50% of poison information specialists to be nationally certified, and demonstration of improved or sustained population penetrance through public and professional education.

Since its inception 34 years ago, the Oklahoma Poison Control Center has provided essential information to the citizens of the states, and a steady growth in the volume of calls received by the center has been observed. In 1996, a total of 60,300 calls were responded to by specialists in poison information. Currently, the staff of the center is comprised of seven full-time and eleven part-time employees. Six of the full-time staff members are registered pharmacists, and all part-time employees are either pursuing or have attained graduate level degrees in clinical pharmacy. Three of the employees are Certified Specialists in Poison Information. In July 1994, responsibility for the operation of the center was assumed by the University of Oklahoma College of Pharmacy. Since that time a major effort has been underway to fulfill the standards of quality required for certification by the AAPCC. While the OPCC has always strived to maintain the highest possible professional standards, it is felt that assessment of the center by an outside interest and verification of quality will only serve to increase the benefit to the population served. Additionally, certification by the AAPCC may serve to increase revenues for the OPCC. Many industrial and manufacturing concerns contract with AAPCC-certified regional poison control centers to provide emergency treatment information regarding exposures to their products. Upon certification, the OPCC plans to actively pursue such contracts.

Analysis of data from a 1995 survey of poison control centers conducted by Felberg et al. reveals numerous differences between centers which had achieved national certification and those which had not.[2] Personnel employed by certified centers were nearly twice as likely to have passed the national

competency examination, and 82% of the medical directors of certified centers were board certified in medical toxicology versus 26% in noncertified centers. Additionally, certified poison control centers achieved greater penetrance (human exposure cases reported/1,000 population served), with certified centers reporting a penetrance of 10.9/1,000 compared to 7.4/1,000 in noncertified centers. These figures demonstrate that utilization of the services of the poison center is more likely in areas served by certified centers (in 1995, although certified centers served 63.1% of the U.S. population, they handled 72.5% of the human exposures reported to all poison centers). This may be partially due to the impact of greater use of health educators in certified centers, which allocated nearly twice as many hours to the education of the public regarding poisoning prevention and treatment when compared to noncertified centers.

In 1996, approximately 30% of all callers to the Oklahoma Poison Control Center heard a busy signal because the center was understaffed. Initial estimates indicate that health care expenditures for these patients may have been as high as 3 million dollars, assuming the majority of these callers then sought medical care in an emergency room. Plans for upgrade of the telecommunications equipment in the center are currently being made so that the number of calls which do not get through are minimized, but without adequate staffing this effort may not be as effective as would be desirable. By increasing the number of staff members to an amount able to thoroughly and completely manage all callers attempting to report toxic exposures to the poison center, and by reaching a larger percentage of the population via public education and national certification, significant cost savings to the citizens of Oklahoma are likely to be achieved. Understaffed poison control centers simply manage emergencies—effective poison control centers prevent poisonings.

National Poison Prevention Week was this month, March 16-22. During this time members of the staff of the OPCC were actively engaged in the education of the public regarding the prevention and treatment of poisonings in the home and workplace. Information regarding Poison Prevention Week and educational material may be obtained by calling the OPCC at 271-5454 (Oklahoma City area) or 1-800-POISON-1 (statewide).

1 Weisman RS, Goldfrank LR. Prevention and the role of the poison center. In Goldfrank LR et al (eds). *Toxicologic Emergencies*. Norwalk, Appleton & Lange, 1994, p 1376.
2 Felberg L, Litovitz TL, Morgan J. State of the nation's poison centers: 1995 American Association of Poison Control Centers survey of U.S. poison centers. *Vet Hum Toxicol* 1996;38:445-453

Rite of spring: Corrections issued for '97 OSMA physicians' directory

As is the norm after the new OSMA *Directory of Physicians* is distributed, several errors have been brought to the attention of OSMA staff members. The following corrections should be noted in 1997 directories:

Drs. **Kenneth E. Bohan, Stanferd L. Kusch, Donald L. Landstrom,** and **John R. Parker,** are OSMA members, not nonmembers as indicated. Also, Dr. **Bohan**'s fax number should be 405-235-2832.

Dr. **Timothy W. Holder**'s listing should show him as a 1987 graduate of the University of Texas Medical School in Houston and his fax number as 918-683-4136.

Dr. **Trina A. Joslin**'s street address should be 350 S. 40th Street and her fax number listed as 918-683-5677.

Dr. **Sherif G. Naguib**'s street address should be Warren Clinic, 3227 S. Lakewood Ave.

The following were inadvertantly omitted from the listing of state hospitals:

Coalgate
Mary Hurley Hospital
6 N Covington
Ph 405-927-2327 Fax 405-927-3303

Cordell
Cordell Memorial Hospital
1220 N Glenn English
Ph 405-832-3339 Fax 405-832-5076

Cushing
Cushing Regional Hospital
PO Box 1409
Ph 918-225-2915 Fax 918-225-2517

Drumright
Drumright Memorial Hospital
501 Lou S Allard Dr
Ph 918-352-2525 Fax 918-352-2721

Duncan
Duncan Regional Hospital
PO Box 2000
Ph 405-252-5300 Fax 405-251-8559

Durant
Medical Center of Southeastern OK
PO Box 1207
Ph 405-924-3080 Fax 405-924-0422

Edmond
Columbia Edmond Medical Center
One S Bryant
Ph 405-341-6100 Fax 405-359-5500

Horizon Specialty Hospital
1100 E Ninth St
Ph 405-341-8150 Fax 405-340-8121

Renaissance Women's Ctr. of Edmond
1800 S Renaissance Blvd
Ph 405-359-9800 Fax 405-330-6933

Every effort is made to assure the accuracy of listings in the directory. However, errors and omissions inevitably occur in a publication of this kind, and we apologize for any inconvenience this may have caused.

Please report to the OSMA any errors you discover in the directory, and corrections will be published here. A correction form is provided on directory page 136.

Deaths

Bruce Hunter Brown, MD
1923 - 1996

McAlester native Bruce H. Brown, MD, died August 4, 1996. He was raised in McAlester and attended Northeastern State College in Tahlequah. In 1943 he began his active duty with the U.S. Army and completed his undergraduate studies at Stanford University. He returned to Oklahoma to attend the University of Oklahoma Medical School and graduated in 1947. Afterwards he completed his internship and residency in obstetrics and gynecology at St. Anthony Hospital in Oklahoma City. In 1949 he joined the McAlester Clinic, returning to Oklahoma City in 1950 to earn a second specialty in radiology. He retired from practice in 1991.

In Memoriam

1996

Charles Eugene Green, MD	March 29
Jane Self, MD	March 30
Erma Ossip Johnson, MD	April 3
Marlene Marie Normand, MD	May 6
Henry Hubert Modrak, MD	May 17
James Polk Luton, MD	May 21
John Hartwell Dunn, MD	May 27
Logan Albert Spann, MD	June 7
Coye Willard McClure, MD	June 19
James Jackson Gable, Jr., MD	July 8
Thomas McNeil Story, MD	July 9
Herschel Jerome Rubin, MD	July 12
John Andrew Graham, MD	July 20
Robert Douglas Anspaugh, MD	July 21
Robert Moran Herlihy, MD	July 24
Ralph Carrol Denny, MD	July
William Allen Heflin, MD	August 3
Bruce Hunter Brown, MD	August 4
Arnold Gordon Nelson, MD	August 26
Ollie Wayne Dehart, MD	August 28
Leslie Arvin Arneson	September 26
Bertram Edward Sear, MD	October 4
Walter Wicker, Jr., MD	October 11
Ellis Edwin Fair, MD	October 21
William Nathan Oxley, MD	October 22
Jesse Day Shipp, MD	October 28
William Manning Moore, MD	November 28
Charles Leonard Benson, MD	December 8
William Norris Harsha, MD	December 17
Ronald S. Barlow, MD	December 21

1997

Edward J. Tomsovic, MD	January 2
Ronald W. Gilchrist, Jr., MD	January 19
Kenneth Rex Scivally, MD	February 8
Hays Richman Yandell, MD	February 19

Kenneth Rex Scivally, MD
1931 - 1997

OSMA Life Member Kenneth R. Scivally, MD, Oklahoma City, died February 8, 1997. Dr. Scivally was born in Hollis, Okla., and attended Southwestern State University, where he graduated Summa Cum Laude. In 1954 he entered the U.S. Army and served two years in the Medical Corps in Frankfurt, Germany. He returned to Oklahoma and earned his medical degree from the University of Oklahoma Medical School in 1962. Both his internship and his two-year internal medicine residency were completed at St. Anthony Hospital in Oklahoma City. Dr. Scivally entered private practice in Oklahoma City in 1966 and retired in 1993.

Hays Richman Yandell, MD
1907 - 1997

Dr. Hays R. Yandell, retired Tulsa surgeon, died February 19, 1997. Dr. Yandell, and OSMA Life Member, was born in Seattle, Wash., in 1907. He graduated from Harvard Medical Center in 1933 and completed an internship and residency at Geisinger Memorial Hospital in Danville, Pa. In 1937 he came to Oklahoma and established a medical practice in Ponca City. Dr. Yandell served with the U.S. Navy medical corps in the South Pacific from 1942 to 1946. In 1959 he became chief of staff at St. John Medical Center in Tulsa and served on its board of governors from 1960 to 1965. Dr. Yandell was one of the surgeons responsible for creating the Tulsa Burn Center. He was a past president of the Oklahoma Chapter of the American College of Surgeons and the Oklahoma Surgical Association, and in 1977 was named Doctor of the Year by the Tulsa County Medical Society Auxiliary.

Classifieds

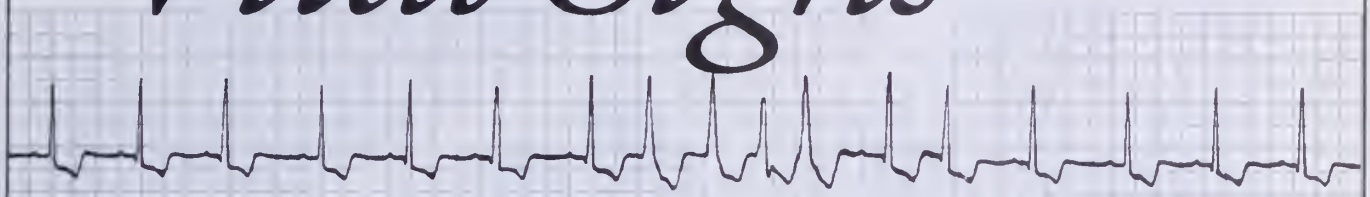
Physicians Wanted

BC/BE FAMILY PRACTICE PHYSICIAN AND GASTROENTEROLOGIST needed for Southern Plains Medical Center, 35 physician multispecialty group in Chickasha OK. Located 35 miles southwest of Oklahoma City on Interstate 44, family oriented college community of 17,000 with service area of 110,000 people. Outstanding medical center with ambulatory surgery center. 156 bed hospital next door. Excellent guarantee and benefits. 4 year university, excellent public schools, good hunting and fishing, water sports, museums. Contact Jeanie Bledsoe, 2222 Iowa, Chickasha OK, 405-222-9583 or 405-224-5507.

Opportunity for EM residency trained physician; board eligible. Salaried position. Malpractice, health and disability insurance and relocation expenses paid. Responsible for Urgent Care Clinic coverage and ER coverage on day shift. Supervision of PAs covering evening, night and weekend ER. Back up coverage provided by medical staff of three physicians. Rural hospital with 55 beds affiliated with Regional Medical Center. Set among the Arbuckle Mountains with adjacent national park and lake. Attractive family oriented community of 7,500. Close to major metropolitan areas. Send CV to Attn.: Administrator, Arbuckle Memorial Hospital, 2011 W. Broadway, Sulphur, OK 73086 or fax (405) 622-5916.

(continued on page 120)

Vital Signs



Where can physicians...

- Communicate and take action on issues of ***vital*** importance,
- Obtain educational information ***vital*** to physician performance and practice operations, and
- Establish ***vital*** linkages with colleagues who are employed, hospital-based, managers or medical school faculty?

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June 19-23, Chicago Marriott Downtown
Chicago, Illinois

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An educational program presented by a distinguished panel of speakers, who will:

- Discuss HEDIS 3.0 and its impact on physician practice,
- Explain the implementation process for commercial and government-sponsored reviews,
- Provide "how to" information on preparing for audits,
- Give insight into the American Medical Accreditation Program (AMAP) and its plan for improving the review process for physicians, and

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To register call **800 AMA-3211** and ask for the Department of Organized Medical Staff Services.

Let the AMA-OMSS serve as your "lifeline" to advocacy and education for you and your patients.

* The American Medical Association designates this educational activity for a maximum of 3 hours in category 1 credit towards the AMA Physician's Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

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Physicians dedicated to the health of America

150 years of caring for the country 1847 - 1997

Make a commitment to your patients and your profession. Join or renew your membership in the AMA today.

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CLASSIFIEDS (CONTINUED)

GREEN COUNTRY EMERGENCY MEDICINE staffs low and medium volume emergency rooms in northeast Oklahoma. Actively seeking full- or part-time physicians, GCEM seeks BE/BC primary care providers. We are especially interested in recruiting internists at this time. For information about salary and benefits, please call 918-456-8562 or page 918-643-7721.

For Sale or Lease

Medical office space for sale or lease in Stillwater. Located adjacent to the Stillwater Medical Center. Call John Heil with Grindstaff-Harris agency at 405-372-0868.

INSTRUCTIONS FOR AUTHORS

Contributions

Articles submitted for publication become the sole property of the JOURNAL and must not have been published elsewhere. The Editorial Board reserves the right to edit any material submitted. Manuscripts must be typewritten or printed in a standard typeface, double-spaced, and submitted in quadruplicate (original and three copies). **In addition, authors are *required* to submit their manuscripts on computer disk, preferably in WordPerfect (any PC version) or text format. Label disk clearly with title and author.** The cover letter should include the following statement, signed by all authors: "In consideration of the publication of this work by the *Journal of the Oklahoma State Medical Association* ("JOURNAL"), the author(s) hereby grant(s), assign(s), or otherwise convey(s) to the publisher all rights, titles, and copyright ownership to the JOURNAL in the event that such work is published by the JOURNAL."

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Style

All manuscripts should approximate the style adopted by the American Medical Association as seen in *JAMA* and detailed in the AMA's *Manual of Style*. When appropriate, an abstract of 150 words or less should accompany the paper and should state the exact question considered, the key points of methodology and success of execution, the key findings, and the conclusions directly supported by these findings.

Bylines may contain no more than six (6) names and shall include only those individuals who can attest that they have contributed to the conception and design, or analysis and interpretation of data; and to drafting the article or revising it critically for important intellectual content; and to final approval of the version to be published. Other contributors may be recognized in an acknowledgment.

References are to be listed in the order of their appearance in the article, and in the style used in the JOURNAL and *JAMA* (author, title, publication, year, volume number, pages). Footnotes, bibliographies, illustrations, and legends should be on separate sheets.

Illustrations

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Call to Convention

It is that time of year for the OSMA-OSMAA Annual Meeting. Mark your calendars for April 25-27, 1997. Once again, the meeting will be held in Tulsa at the Marriott Hotel.

The format this year will be a little different. The Alliance pre-board meeting will be held on Friday morning followed by a joint luncheon with the OSMA. Oklahoma's first lady, Cathy Keating, will be our speaker. Friday afternoon the Tulsa County Alliance will host a High Tea at Mary and Stuart Hoff's home. The rest of the afternoon will be yours to browse the shops in Utica Square or find that perfect antique in a Cherry Street shop. Also, the Philharmonic Designer Showcase home opens for viewing that day. A special treat this year as the house is the historic McBirney Mansion. You won't want to miss it. Friday evening there will be a reception-cocktail party hosted by the OSMA. Following that, you may either attend the OU Dinner or try one of the many excellent restaurants in the city. At 9 p.m. there will be cordials and dancing to the music of the Buddy Billen Band from Oklahoma City. This will be a fun evening to visit with old friends and get to know new as you place your bids on items in the AMA-ERF auction that will be going on as well.

Past state presidents will gather for their annual breakfast Saturday morning. OSMAA President-Elect Doris Edge will host current county presidents and presidents-elect in her suite for morning coffee before our House of Delegates meeting. A buffet luncheon will follow and at that time we will total the bids on the AMA-ERF Fund Raiser. The post-board meeting will follow the luncheon.

A change this year will find the new OSMAA president being installed Saturday night at the banquet. Installing Doris Edge will be National AMAA Secretary Diane Chow from McLean, Virginia.

We are trying the new format this year to coincide with the OSMA schedules. It is hoped that you will plan to attend. We've ordered perfect weather and the trees and flowers should be in full bloom.

See you in Tulsa.

—Maggie Hubner
State Convention Chair

THE LAST WORD

■ **The Oklahoma State Medical Association will elect officers,** trustees, AMA delegates, and PLICO board members during the Annual Meeting of the OSMA House of Delegates in April. David M. Selby, MD, Enid, will succeed David Harper, MD, Tulsa, as president. Offices open for election will be president-elect, vice-president, and secretary-treasurer.

Due to an increase in AMA membership from Oklahoma, the OSMA has gained one additional delegate and one additional alternate delegate. Consequently five AMA delegate slots and five AMA alternate delegate slots will be contested. Any physician wishing to run for a delegate slot must have serve at least one term as an alternate delegate or as an officer of the association. There must be twice as many candidates for alternate delegate positions as there available positions (i.e., with five slots open, there must be ten candidates).

Candidates for delegate and alternate positions must meet the following criteria: (1) Must be an active member of OSMA. (2) Must provide a letter of nomination signed by a member of the OSMA House of Delegates. The letter of nomination must arrive at OSMA headquarters 25 days prior to this year's April 27 election.

AMA delegates and alternate delegates serve two-year terms and are required to attend two national meetings a year, one in June in Chicago and another in late November or early December at another site.

Six positions are open on the PLICO Board of Directors. PLICO board members serve three-year terms and are expected to attend quarterly PLICO board meetings.

■ **News from OUHSC Tulsa campus: Frank A. Clingan,** MD, has retired as chair of the surgery department. Dr. Michael McGee has been appointed interim chair.

F. Daniel Duffy, MD, has left Tulsa to join the American Board of Internal Medicine (ABIM) as senior vice president. He and his wife moved to their new home in Philadelphia in January. Dr. Michael Weisz is serving as interim chair.

An Office of Clinical Affairs has been established, and Daniel C. Plunkett, MD, has been appointed director.

■ **The first Oklahoma Immunization Summit—Sooner** Be Immunized!—will be held Wednesday, April 16, 1997, at the Radisson Inn in Oklahoma City. All private and public vaccine providers from across the state are invited to participate. Featured guest speaker for the summit will be Walter A. Orenstein, MD, director of the National Immunization Program, Centers for Disease Control and Prevention. Topics to be covered at the meeting include (1) update on new vaccines and vaccine combinations; (2) computer tracking; (3) reminder/recall; (4) eliminating barriers; (5) assessment of clinic records; (6) true and false contraindications; and (7) outreach activities.

The state of Oklahoma has a 74% coverage level for two-year-olds, according to the 1996 survey conducted by the Oklahoma State Department of Health. The goal is to have 90% of Oklahoma two-year-olds up to date by Year 2000. The immunization summit, through a broad, inclusive campaign, will furnish tools needed for both public and private providers to join forces in closing the 16% gap

Application is being made for CME credit. Summit agenda and registration information are to be mailed statewide in March. The summit planning committee is made up of representatives from the Oklahoma State Department of Health, Immunization Corps, Oklahoma State Medical Association, Oklahoma Osteopathic Association, and Indian Health Services.

■ **The agency for Health Care policy and Research (AHCPR)** and the Office of the Assistant Secretary for Planning and Evaluation (ASPE) of the U.S. Department of Health and Human Services have joined in an effort to develop a systematic analysis of information sources used by physicians and the effects of information use on physician practice.

The study, *Information to Guide Physician Practice,* is a review and analysis of the literature on sources of information available to physicians, the mechanisms they use to determine which information is most valuable, and how that information is implemented in a clinical practice environment. Online electronic sources also are reviewed and the results of three physician focus groups assessing information are compared. As part of this project, an interactive 4-disk database, *Physician Information Literature Database,* has been created to give researchers easy access to the literature synthesized in the study. This database contains summaries and citation information for the 233 articles reviewed. An overview of the study is available from the AHCPR Web site <http://www.ahcpr.gov> by selecting Research Portfolio from the home page. For additional information on these studies, contact the National Technical Information Service (NITS) at 703-487-4650.

■ **As a result of the Oklahoma State Department of Health's** report *"The State of the State's Health,"* the Oklahoma consortium for Improving the Health of Oklahomans (OCIHO) has been formed to facilitate the process of reducing premature death and disability in Oklahoma. The steering committee includes representatives for various medically related groups and associations, including OSMA, the Oklahoma Osteopathic Association, American Heart Association, American Diabetes Association, University of Oklahoma Health Sciences Center, Oklahoma Health Care Authority, Oklahoma State Department of Health, Oklahoma City and Tulsa City-County health departments, and the Alliance on Aging. The group's first meeting was held February 15. OSMA Acting Executive Director Kathy Musson and Associate Director Lyle Kelsey attended as the association's representatives, and Dr. Gordon Deckert is the acting chair for OCIHO. J



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APRIL 1997



David M. Selby, MD

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APRIL 1997 VOL. 90, NO. 4

EDITORIAL

Just an ACT 131
R.V. McINTYRE, KINGFISHER

PRESIDENT'S PAGE

The Practice of Medicine Is a Privilege 133
D.L. HARPER, TULSA

SPECIAL

Medicaid: A Comparison of Oklahoma and Surrounding States, 1990-1994 135
E.N. BRANDT, R. BROYLES; OKLAHOMA CITY

Fraud and Abuse Provisions in the Health Insurance Portability and Accountability Act: A Guide to the New Act for Physicians 139
R.G. MCCAMPBELL, OKLAHOMA CITY

Change Offers Children the Best of Both Polio Vaccines 142
OKLAHOMA STATE DEPARTMENT OF HEALTH & CENTERS FOR DISEASE CONTROL AND PREVENTION

The State of the State's Health: A Report from the Oklahoma State Board of Health 150

NEWS

Enid's David Selby assumes association presidency on April 26, 157... Oklahoma adopts more stringent laws on telemedicine, 157... Association grateful to exhibitors and sponsors, 158

DEPARTMENTS

Poison Control Center, 158... Health Department, 159... Deaths, 163,... In Memoriam, 163... Classifieds, 163... Alliance, 171... The Last Word, 172

ABOUT THE COVER

David M. Selby, MD, becomes the 92nd president of the Oklahoma State Medical Association in Tulsa this month.

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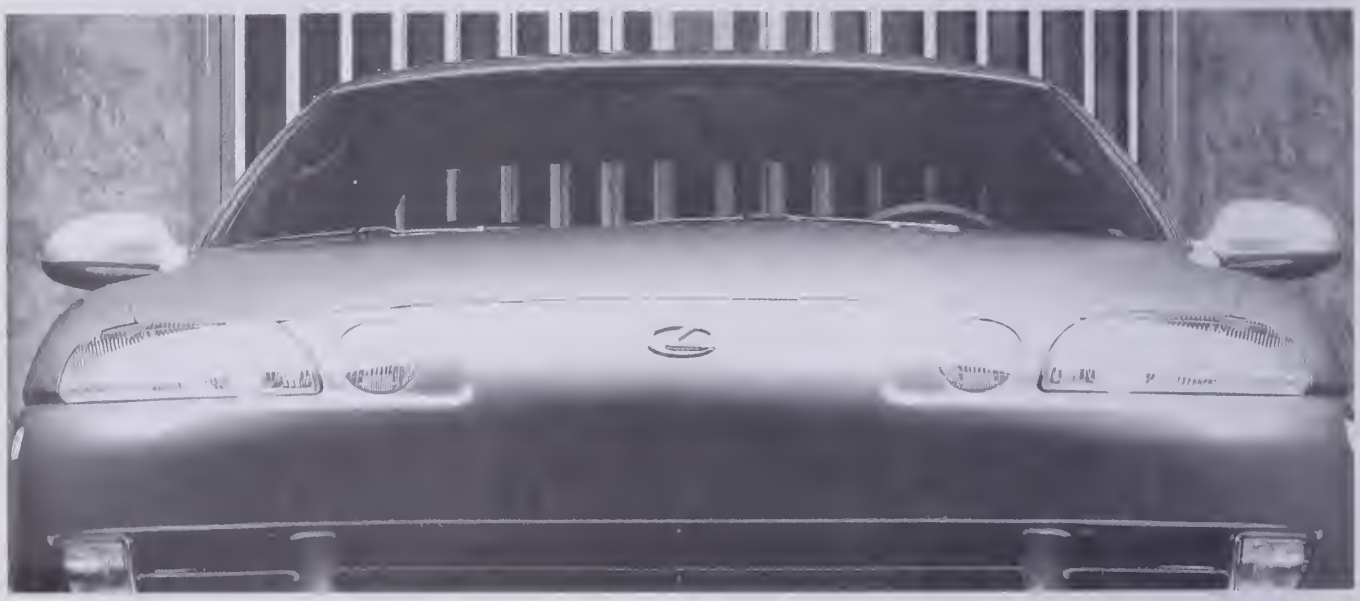
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Just an ACT

The provision of health care is a contentious issue in American society. In terms of human history, only a short while ago the majority of health care deliveries were a one-to-one transaction delimited primarily by free market and golden rule ethics constraints. Now, however, most medical care is delivered by a "committee" that includes ancillary practitioners, insurance accountants, and sundry "vendors," and it goes to a government patient who is pathologically dependent on a variable list of bureaucratic agencies.

Scientific medicine has accomplished great and marvelous advancements, but the human logistics of health care delivery has not kept pace with the science.

This chaotic state of human logistics in modern medicine is emphatically signaled by the recent passage of the Health Insurance Portability and Accountability Act of 1996. Some of the salient aspects of the act are discussed on elsewhere in this issue, and this work deserves the thoughtful attention of every practicing physician.

It is mind-boggling to contemplate the amounts of money that are dedicated to this task, and it is harrowing to foresee the growth possibilities of the investigative agency set upon us by this act.

We personally have an unshakable confidence that nearly all physicians are honest and working hard to make our flawed health care system work in a reasonable manner. And from this viewpoint, many physicians may incorrectly assume that the government will focus on the peripheral practitioners and "vendors." However, we must keep in mind that many government health care delivery programs have been consciously designed to circumvent marketplace medical economics and to promote patient dependency on the government. Also, we remember that the major government medical programs have been expanded, changed, limited, cut, and reformed in a most erratic, illogical, and inexplicable manner. Thus we have a system that no one can use in a faultless manner, and the concern arises that the line between error and fraud may be seen unclearly by a political agency.

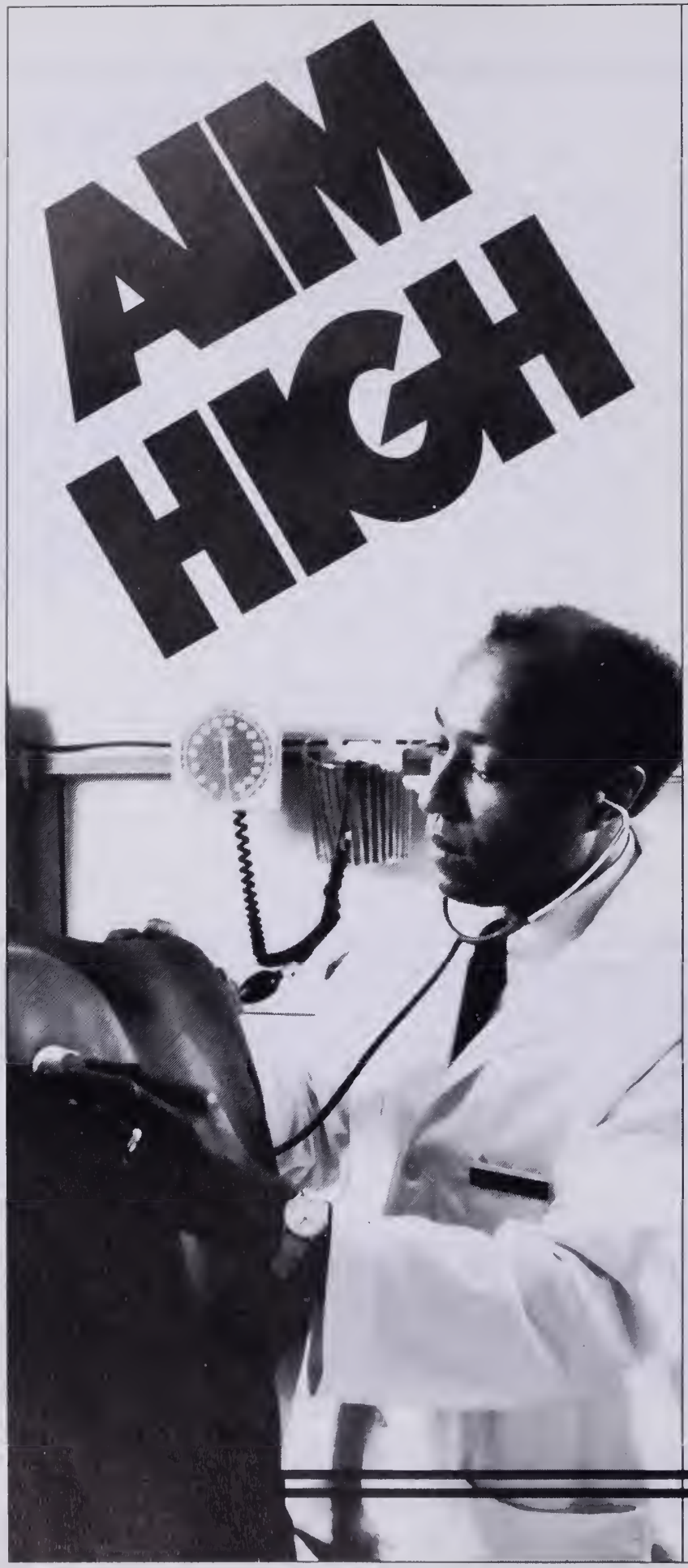
There is also concern about an expansion of the criminal activity definitions of upcoding, unbundling, and unnecessary service. Already yet the government accountants have unilaterally seized the right to downcode and to bundle charges after the service is rendered. All too often the "unnecessary service" determination is handed down by the government on accounting factors rather than on clinical medical reasons.

Thus we have a system with many millions of transactions every day that is so rife with interpretive decisions that there are also several million paperwork errors committed every day. The investigation of fraud in this vast ocean of errors will give almost unlimited opportunity for the overzealous prosecutor to indict the physician.

We physicians must continue to be scrupulously honest. We must give increased time to evaluating and reducing the paper error rate. We must practice the best ethical medicine we can. Many of us must prepare for a new turbulence in the practice of medicine.

Kay V. McIntyre, M.D.

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AIR FORCE

The Practice of Medicine Is a Privilege

The practice of medicine is a privilege. This privilege holds significant implications for all of us as members of the Medical Profession and particularly as members of the Oklahoma State Medical Association. As the officer elected to lead our Association for the next year, I am cognizant, and becoming more keenly aware each day, of the many facets involved with the privilege we enjoy as practitioners of medicine. It is imperative we fulfill our obligations and conduct our affairs in a manner which justifies this privilege and the confidence and trust placed in us by our patients - the People of Oklahoma.



For me personally, it is a privilege to follow in the very able footsteps of Dr. David Harper; his insight, hard work, and straightforward leadership have charted a course of excellence for our Association. It has been a privilege as President-elect and will continue to be a privilege to work with the Association's loyal and outstanding staff. Their dedication and diligence are responsible for the effective and efficient administration and day-to-day operation of the Association.

With any privilege, there are responsibilities; responsibilities which I am very proud to say that all of us take most seriously. The draft of the OSMA Mission Statement eloquently expresses these responsibilities: "To promote the best health for the people of Oklahoma in a professional, ethical and compassionate manner by advocating for patients, representing physicians and promoting the art and science of Medicine." Our commitment to the principles, in particular our Association's acceptance of the role of patient advocate, led to our lobbying effort which was a key element in passage of Immunization and drive-through mastectomy bills this past legislative session. Through the tireless work of Dr. Ed Brandt, Jr., Chairman of the OSMA Council on State Legislation and Regulation, our Association is providing critical support for The Fairness in Managed Care Act, which currently is making its way through the legislative process.

Of great importance are initiatives to improve the overall health of the people of Oklahoma of all economic strata, initiatives such as the creation of an Oklahoma Consortium for Improving the Health of Oklahomans. Formation of this Consortium is spearheaded by Dr. Gordon H. Deckert, President of the Board of Health, as a result of his State of the State's Health Report. Our Association will wholeheartedly support and participate in these types of initiatives.

In an age of almost daily change in the environment in which we practice, adequate communication is vital. If we are to fulfill our obligations as the patient's advocate and to enhance unity and collegiality of our profession, prompt and accurate dissemination of information is critical. Presently, the written word provides the primary means of communication for the OSMA. Utilizing *The Journal* and the monthly *OSMA News*, our membership has been kept abreast of activities at the Association headquarters and of the scientific and political developments necessary to adequately manage our practices and to care for our patients. This year, I plan to establish a new council to incorporate the already existing written work with the vast information available on the electronic highway. This expanded communications effort is mandatory.

A current and very real concern of all of us is the selection of a new Executive Director for our Association. The Search Committee established by the Board of Trustees is moving carefully and purposefully to assure the selection of the best person for this position. You will be kept up-to-date as these deliberations progress.

As your OSMA President, I will make every effort to meet the requirements of this office with integrity by being available and accountable. Thank you for the privilege.

David M. Kelly, M.D.



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Medicaid: A Comparison of Oklahoma and Surrounding States, 1990-1994

Edward N. Brandt, Jr., MD, PhD; Robert Brayles, PhD

Medicaid has been the "safety net" for certain low-income people. In recent years, many states, including Oklahoma, have determined ta enrall beneficiaries in managed care plans in an attempt to hold dawn the casts. Oklahoma began enrolling peaple in 1995, and the issue will be: was the managed care appraach successful at least in cantrolling casts? Ta prepare, expenditures far the faur years prior ta the managed care appraach have been analyzed. Comparisan with surrounding states indicates that Oklahama was already successful with negative average annual growth rates far the periad 1992-1994, and that Oklahoma was mare successful than surraunding states.

Medicaid (Title XIX of the Social Security Act) is the "safety net" for health care for certain poor, specifically, recipients of Aid to Families with Dependent Children (AFDC), Supplemental Security Income (SSI), and certain other welfare programs. In addition, Medicare recipients with incomes below the federal poverty level are eligible for Medicaid funding for co-payments and deductibles as well as long-term care, including nursing home care. Furthermore, children and pregnant women must be covered up to 135% of the poverty level, with coverage possible up to 185% of the poverty level at the state's option.

Direct correspondence to Edward N. Brandt, Jr., MD, PhD, Regents Professor and Director, Center for Health Policy Research and Development, College of Public Health, University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, OK 73190.

In recent years, one major change that has affected Medicaid is the adoption of mandatory managed care programs by many states. In 1994, 18% of the growth in Medicaid spending was attributed to managed care organizations.[1] Nearly 30% of AFDC recipients are now covered by managed care.[1] Unfortunately, further increases in managed care enrollment may make it impossible to determine the cause(s) of any per capita cost increases since most state contracts do not require a breakdown of expenditures. This will make it difficult, if not impossible, for responsible policymakers to make appropriate decisions about health care for Medicaid beneficiaries in the future.

Another potential major change in the Medicaid program is passage of the "Welfare Reform" bill known officially as Public Law 104-193, The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA). Although the provisions of this law are complex, it appears that the impact on Medicaid could be profound.

It is important to recall that Medicaid has always been restricted to persons receiving cash assistance or being directly connected to a cash assistance program even though not receiving cash. In recent years, Congress added mandatory coverage for pregnant women and children with incomes less than 135% of the poverty level. However, many people who will no longer receive welfare payments, such as non-pregnant women, may also lose coverage under Medicaid.[2] At this time, it is not clear how Oklahoma will implement PRWORA.

Table 1. Medicaid Beneficiaries

State	Numbers (Thousands) 1990	1992	1994	Average Annual Growth (%) 1990-92	1992-94
United States	24,066	29,811	34,183	11.3	7.1
Arkansas	254	319	337	12.1	2.8
Texas	1,442	2,007	2,514	18.0	11.9
New Mexica	129	212	258	27.9	10.3
Calarada	191	259	287	16.5	5.3
Kansas	194	225	252	7.6	5.8
Missauri	448	554	669	11.2	9.8
Arizona	276	402	509	20.6	12.5
Oklahama	271	356	388	14.6	4.4

Table 2. Medicaid Expenditures–Total

State	Total Amounts (Millions) 1990	1992	1994	Average Annual Growth (%) 1990-92	1992-94
United States	$72,062	$119,596	$143,729	28.8	9.6
Arkansas	639	959	1,107	22.5	7.4
Texas	3,248	6,306	8,502	39.3	16.1
New Mexica	305	540	705	33.1	14.3
Calarada	575	1,024	1,151	33.4	6.0
Kansas	548	939	1,015	30.8	4.0
Missauri	982	2,364	2,606	55.2	5.0
Arizona	724	1,327	2,047	35.4	24.2
Oklahama	784	1,118	1,141	19.4	1.0

Table 3. Medicaid Expenditures Benefits Only

State	Amount (Millions) 1990	1992	1994	Average Annual Growth (%) 1990-92	1992-94
United States	$69,131	$97,639	$120,222	18.8	11.0
Arkansas	617	929	1,071	22.7	7.4
Texas	3,080	4,749	6,624	24.2	18.1
New Mexica	293	496	657	30.0	15.1
Calarada	537	872	1,013	27.5	7.8
Kansas	458	610	816	15.4	15.7
Missauri	906	1,614	1,820	33.5	6.2
Arizona	553	1,138	1,466	43.4	13.5
Oklahama	720	1,022	1,017	19.2	(0.2)

Table 4. Medicaid Expenditures Per Beneficiary – Benefits Only

State	Amount 1990	1992	1994	Average Annual Growth (%) 1990-92	1992-94
United States	$2,873	$3,275	$3,517	6.8	3.6
Arkansas	2,431	2,913	3,176	9.5	4.4
Texas	2,136	2,367	2,635	5.3	5.5
New Mexica	2,266	2,341	2,551	1.6	4.4
Calarada	2,814	3,371	3,533	9.4	2.4
Kansas	2,357	2,712	3,241	7.3	9.3
Missouri	2,021	2,911	2,721	20.0	(3.3)
Arizona	2,002	2,830	2,880	18.9	0.9
Oklahama	2,652	2,867	2,619	4.0	(4.4)

The National Scene

The following information is obtained largely from a study by Drs. John Holahan and David Liska of The Urban Institute (see reference 3) commissioned by the Kaiser Foundation Commission on the Future of Medicaid.[1] The Kaiser Commission on the future of Medicaid was established by the Henry J. Kaiser Family Foundation in 1991 to function as a Medicaid policy institute and serve as a forum for analyzing, debating, and evaluating future directions for Medicaid and other health reforms with the overarching goal of improving access to care for low-income Americans. The commission is composed of 14 people including two Oklahomans (Edward N. Brandt, Jr., MD, and the Honorable Henry Bellmon) and two other native Oklahomans (Karen Davis, PhD, president of the Commonwealth Fund in New York, and Ronald Anderson, MD, CEO of Parklawn Hospital in Dallas).

During the period 1988-1992, Medicaid expenditures rose nationally from $53.3 billion to $119.9 billion for an annual growth rate of 22.4%, while during the same period the number of beneficiaries increased from 22.0 million to 29.8 million for an annual growth rate of 7.9%. This rapid rate of growth in expenditures resulted from a variety of causes: congressional mandates that increased the enrollment of pregnant women, children, disabled and elderly; state efforts to increase federal support through the use of provider taxes, donations, and funds for disproportionate share hospitals (DSH); and increased health care use due to the health status of the new beneficiaries.

Because Medicaid spending was the fastest growing expenditure in most states, the governors began to demand federal action and the resulting policy options generated great debate in the Congress, the Administration, and many public and private organizations, leading to little significant action. However, one important congressional action limited the abilities of the states to increase their federal matching funds through the use of DSH payments. An equally important factor was a decrease in the rate of growth of beneficiaries from 7.9% during the period 1988-1992 to 5.3% during the period 1992-1995, and a decline in expenditures per beneficiary from 9.5% to 4.9%, respectively. As a result, the growth rate in Medicaid expenditures fell to 9.5% in 1992-1995, less than half of the growth rate seen from 1988 through 1992. Furthermore, as estimated by the Health Care Financing Administration (HCFA), the growth rate for 1995-1996 is 3.2% per year.

One aspect of the Washington debate was based upon the projected spending for 1996-2002 by the Congressional Budget Office (CBO) in April

1996. The CBO estimated an annual growth rate in expenditures of 9.2%; in beneficiaries of 2.7%; and in expenditures per beneficiary of 7.3%. However, with later data, the Urban Institute projects the 1996-2002 annual growth in total expenditures to be 7.4% (for a savings of $59.3 billion compared to the CBO projections); in beneficiaries of 1.6%; and in expenditures per beneficiary of 6.1%.[1] Either or both of these projections could be upset by action of the states under the PRWORA.

Oklahoma Experiences

Because of the introduction of managed care for Oklahoma Medicaid beneficiaries and the present uncertainty of Oklahoma's decisions on the PRWORA, it seems reasonable to examine Oklahoma experiences for 1990-1994 to measure future changes. This will provide a quantitative basis for the state legislature to assess policy options and enhance eventual effectiveness.

The data in Tables 1 through 6 were obtained from official HCFA records.[1] The states immediately adjacent to Oklahoma were selected for comparison because of the similar demography of these states. In addition, Arizona was included because it has the longest experience with managed care for Medicaid beneficiaries and is often cited as the most effective example.

Table 1 depicts the number of beneficiaries and the average annual growth rate for the years 1990, 1992, and 1994. Please note that these are only the beneficiaries that received some health care. For example, 388,000 Oklahomans benefited from the program in 1994 although there were nearly 450,000 eligible people. These data indicate that Oklahoma had a growth rate in 1990-1992 that was fifth highest (and higher than the United States) of the 8 states, but for 1992-1994, only one state (Arkansas) had a lower growth rate.

Total Medicaid expenditures and growth rates are shown in Table 2. In this instance, Oklahoma had the lowest growth rate in both 1990-1992 and 1992-1994. During the period 1992-1994, total expenditures rose by only 1% in spite of a growth rate of 4.4% in beneficiaries. Contrast that with the experience of Arizona, which had an expenditure growth rate (24.2%) nearly double the rate of growth in beneficiaries (12.5%).

Expenditures for the health care benefits are isolated in Table 3. The difference between these and total expenditures shown in Table 2 are largely administrative costs and DSH payments. The most interesting aspect of this table is that spending in Oklahoma decreased during the period 1992-1994 and was the only state to do so.

The expenditures (benefits only) per beneficiary are shown in Table 4. Again Oklahoma spending per beneficiary decreased during 1992-1994 and was the lowest of all of the states. However, the expenditures per beneficiary are heavily influenced by the proportion of the more expensive beneficiaries (aged, blind, and disabled) as opposed to the less expensive. For example, in 1994 in Oklahoma, the total expenditures per beneficiary ranged from approximately $1,200 for AFDC recipients to slightly over $6,000 for aged, blind, and disabled. In 1994, the percentages of aged, blind, and disabled beneficiaries ranged from 16.7% in Arizona to 40.2% in Arkansas. Oklahoma's percentage was 26.8% which was essentially the same as the United States percentage and third among the eight states. Hence, the proportions of differing groups does not explain the differences among states in Table 4.

The data depicting expenditures for acute and long-term care are isolated in Tables 5 and 6 respectively. In both cases, Oklahoma had the lowest annual rate of growth.

Table 5. Medicaid Expenditures – Acute Care Services

State	Amount			Average Annual Growth (%)	
	1990	1992	1994	1990-92	1992-94
United States	$36,741	$55,065	$71,178	22.4	13.7
Arkansas	321	525	574	27.9	4.6
Texas	1,854	3,111	4,591	29.5	21.5
New Mexico	184	325	454	32.8	18.3
Colorado	255	494	589	39.2	9.2
Kansas	201	286	407	19.3	19.2
Missouri	477	853	1,070	33.8	12.0
Arizona	342	870	1,098	59.5	12.4
Oklahoma	366	552	558	22.9	0.5

Table 6. Medicaid Expenditures – Long Term Care Services

State	Amount			Average Annual Growth (%)	
	1990	1992	1994	1990-92	1992-94
United States	$32,391	$42,574	$49,044	14.6	7.3
Arkansas	296	404	497	16.8	10.9
Texas	1,226	1,639	2,033	15.6	11.4
New Mexico	109	171	203	25.2	8.8
Colorado	282	378	424	15.9	5.9
Kansas	257	324	409	12.3	12.4
Missouri	429	761	750	33.1	(0.7)
Arizona	212	268	368	12.5	17.1
Oklahoma	354	470	459	15.2	(1.1)

Discussion

The purpose of this study was to review the Medicaid programs in Oklahoma, the six adjoining states, Arizona, and the United States to provide a baseline for evaluating the future. The data in-

dicate that during the period 1992-1994, Oklahoma began to control the *rate* of growth of Medicaid expenditures. Indeed, the annual rates of change in expenditures per beneficiary, in total expenditures for benefits, and in expenditures for long-term care were negative. In fact, Oklahoma controlled costs more effectively than surrounding states and the United States as a whole. These data will provide a good baseline for future studies as Oklahoma moves further into managed care.

It is also clear from the data that the United States as a whole has reversed the marked expenditure increases in Medicaid that occurred during the 1988-1992 period. There are several possible reasons for this, but the two that can be quantified are the limits on DSH payments and the decreased rate of growth of new beneficiaries. Other possibilities have been put forth including the increasing numbers of Medicaid recipients in managed care and the role of scientific advances that have made it possible to treat people more effectively and efficiently, thereby decreasing use of expensive inpatient stays. However, there are no good analytic studies to establish the contribution of either of these. Perhaps further studies will elucidate the roles of each of these factors.

Unfortunately, the data contained herein do not address the issue of quality of care. However, information is now being collected by studies supported by the Kaiser Family Foundation and the Commonwealth Fund. When these studies are complete, it should be possible to examine the relationship between efforts to control costs and their effect on the quality of care.

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Fraud and Abuse Provisions in the Health Insurance Portability and Accountability Act: A Guide to the New Act for Physicians

Robert G. McCampbell

The Heolth Insuronce Portobility ond Accountability Act, mony provisions of which become effective on Jonuory 1, 1997, will have o significant impact in the orea of heolth care froud ond abuse. This article examines the froud and abuse provisions of the new oct from the point of view of the procticing physicion. The greatest impoct on the health care provider will come from the increased enforcement resources which will be availoble as a result of the oct. The act olso contains some particulor substantive odditions to heolth core fraud ond obuse law which will be applicoble to physicions, including provisions penolizing heolth care fraud, wrongful disclosure of individually identifioble health informotion, folse certification for home core, ond folse stotement to a heolth benefit progrom.

I. Introduction

The Health Insurance Portability and Accountability Act of 1996 was signed into law on August 21, 1996, and many of its provisions took effect on January 1, 1997. While most of the media attention to that act has focused on its health insurance portability provisions, a major portion of the act concerns health care fraud and abuse. With respect to fraud and abuse, the act serves two primary functions. First, it increases the resources to be spent fighting health care fraud and abuse. Second, it enacts new substantive provisions. This article will review and analyze the fraud and abuse provisions of the act as they will relate to the practicing physician.

II. New Enforcement Resources

A. Funding—The most important manner in which the act increases enforcement resources is through funding of the Health Care Fraud and Abuse Control Account created by the act. That account will be funded not only by appropriations, but by civil monetary penalties, assessments, fines, gifts, and bequests. (Figure 1 shows the scheduled appropriations to the control account.) The important fact regarding the control account is that use of its funds will be restricted to health

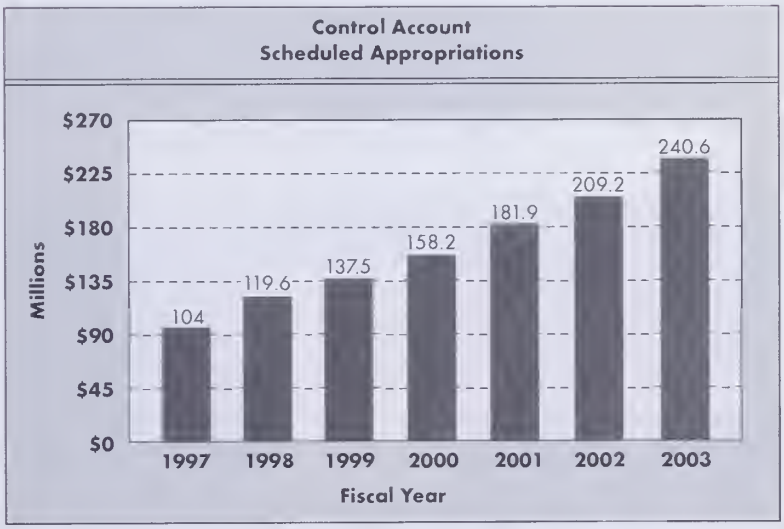


Figure 1.

Direct correspondence to Robert G. McCampbell, Crowe & Dunlevy, 1800 Mid-America Tower, 20 North Broadway, Oklahoma City, OK 73102-8273.

care fraud programs. The use of funds is limited to: (1) proseeution, (2) investigation. (3) auditing, (4) inspection, and (5) edueation eoncerning health care fraud. (Figure 2 illustrates the operation of the eontrol aecount.) The eontrol aceount, therefore, will create a large pool of resourees that ean be expended only in pursuing alleged fraud. Bccause fines, penalties, assessments, and forfeitures will go into the aceount to fund further enforeement activity, the program has the potential of becoming a mammoth, self-funding enforeement bureaucracy directed solely toward health care providers. This will be very different from the traditional model in whieh law enforcement resources are allocated to the greatest need.

B. Medicare Integrity Program—The aet also establishes a Medieare Integrity Program which also will increase resourees in fraud and abuse enforeement. That program is required to provide a system for encouraging suggestions from individuals to improve the efficiency of the Medicare system. In addition, the program will provide for a "bounty" system, similar to that employed by the Internal Revenue Serviee, in which a person reporting health care fraud and abuse ean receive a portion of the money collected by the government. While current law allows a person to reeeive part of the proeeeds collected by the government through the institution of a so-called *qui tam* action, the bounty provisions in the act will be much easier to access than the *qui tam* provisions.

The Medicare Integrity Program also provides for funding of privatc contractors to fight fraud and abuse. The thought is that private fraud specialists could be employed to diseover fraud and abusc in the Medicarc system and would be morc sophistieated at discovering patterns of upeoding, unbundling, double billing, and the likc.

The act includes the following levels of funding to the Health Carc Finance Authority (HCFA) for the Medicarc Integrity Program:

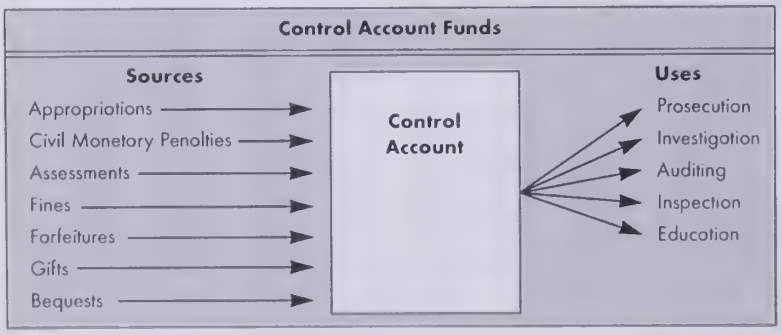


Figure 2.

Medicare Integrity Program

FY 97	$430 - 440m
FY 98	$490 - 500m
FY 99	$550 - 560m
FY 00	$620 - 630m
FY 01	$670 - 680m
FY 02	$690 - 700m
Thereafter	$710 - 720m

C. Data Collection Program—An additional resouree added to fighting fraud and abuse by the aet is the creation of the Health Care Fraud and Abuse Data Collection Program. This data eollection effort will inelude information on any final adverse action taken by a government agency or health plan against a health care provider, supplier, or practitioner. Access to the data will be provided to federal and state agencies and health plans. The aet provides for insulation from liability for reporting to the program and also provides for coordination with the National Praetitioner Data Bank.

III. Substantive Provisions

A. Introduction—The aet ineludes several noteworthy substantive provisions. It enaets several new erimes and expands the government's authority to exclude a provider and to impose civil monetary penalties. The act also inereases the seope of many provisions currently on the books. While most federal health care fraud and abuse statutes had been direeted to Mediearc and Medieaid, the government's authority is now expanded to reaeh all federally or state funded programs or, in some eases, all health care even if privately funded.

B. Provisions—The new substantive provisions which will most directly affeet physieians include:

Home Care Certification. A provision was added speeifically prohibiting false certifieation that an individual is eligible for home earc.

Health Care Fraud. The aet includes an "all payer" fraud statute punishing virtually any type of fraud connected with health care.

False Statement. The act punishes one who makes a false statement in conneetion with delivery of health service.

Wrongful Disclosure. The act punishes wrongful disclosure of "individually identifiable health information." The range of possible punishment increases if the disclosure was made with intent to defraud or for the purpose of personal or commercial gain.

Anti-Kickback Act. The Anti-Kickbaek Act is expanded to reach not only Medicare and Medicaid payments, but payments from virtually every federally or state funded health program.

Obstruction of Investigation. The aet adds a

provision criminalizing the obstruction of an investigation.

The act adds several practices to those for which a civil monetary penalty may be assessed:

- A pattern of upcoding
- A practice of claiming for unnecessary service
- Offering remuneration to an individual to influence selection of a provider. Remuneration in this instance can include the waiver of co-insurance or deductible, but there is an exception for financial need.

C. Exclusion—The act contains several provisions regarding excluding a provider from the Medicare program. It adds to the list of events for which exclusion is mandatory a conviction of a health care felony and a conviction for a controlled substance felony. The act also adds a provision for permissive exclusion of an individual owning or controlling an entity which has been sanctioned. This section is notable in that it includes no intent requirement for the exclusion of an officer or managing employee of a sanctioned entity. While the government has a legitimate interest in excluding some managing officers of sanctioned entities in some instances, there is a clear opportunity for abuse in this provision.

D. Advisory Opinions—In a significant victory for the health care provider community, the act requires the Secretary of Health and Human Services to issue advisory opinions regarding the Anti-Kickback Act. HHS would be required to issue an opinion when requested, and that opinion would be binding on the government. HHS issued preliminary regulations governing the requesting of an advisory opinion on February 19, 1997. Those regulations allow not more than 60 days for HHS to issue an opinion once it is requested, and allow HHS to charge a fee of $250 plus $100 per hour for time spent in the issuance of advisory opinions.

Advisory opinions shall be required, if requested, on the subjects of (1) What constitutes prohibited remuneration, (2) Whether an arrangement is within an exception, (3) What constitutes inducement, and (4) Whether an activity constitutes grounds for sanctions.

Advisory opinions shall not address (1) Whether fair market value was paid for goods, services, or property, or (2) Whether an individual is a bona fide employee. HHS announced on March 6, 1997, that it is proposing legislation which will repeal the advisory opinion requirement.

IV. Conclusion

The fraud and abuse provisions of the Health Insurance Portability and Accountability Act of 1996 represent a significant commitment by the federal government to the fighting of health care fraud and abuse. Over the next several years, this commitment by the federal government should be anticipated to effect every practicing physician. J

The Author

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SPECIAL

Are you familiar with the new polio vaccine schedules? Providers will be the primary source of information about immunization schedules...

Change Offers Children the Best of Both Polio Vaccines

From the Oklahoma State Department of Health and the Centers for Disease Control and Prevention

The new sequential polio vaccine schedule will be implemented in April by the Oklahoma State Department of Health (OSDH). The schedule recommends two doses of inactivated polio vaccine (IPV) followed by two doses of oral polio vaccine (OPV). Physicians participating in the Vaccines for Children (VFC) Program will receive a packet of information from OSDH, with the schedule changes, by April 15. The following information is being published to answer physicians' questions and to facilitate the transition to the new schedule.

The Centers for Disease Control and Prevention (CDC) has accepted the recommendation of the Advisory Committee on Immunization Practices (ACIP) to change the routine childhood polio vaccination schedule. To decrease the occurrence of vaccine-associated paralytic polio (VAPP), as well as to protect the community from outbreaks of wild poliovirus, the CDC's recommendation is that children in the United States receive two doses of IPV followed by two doses of OPV. CDC also continues to believe that both the four-dose schedule of OPV, currently routinely recommended, and the alternate four-dose schedule of IPV remain acceptable options for childhood immunizations.

Following are questions and answers published by the CDC:

1. Why did CDC and ACIP change the polio schedule?

The CDC and ACIP changed the polio schedule because the only indigenously acquired polio in the U.S. in the last 17 years has been due to the vaccine, while there have been no polio cases due to the wild poliovirus. The ACIP determined that the current risk-benefit ratio associated with the exclusive use of the OPV for routine immunization has changed because of the rapid progress in global polio eradication efforts. In particular, the benefits of OPV have diminished in importance due to the elimination of wild poliovirus–associated poliomyelitis in the Western Hemisphere since 1991 and the reduced threat of poliovirus importation into the United States. Conversely, the risk of VAPP due to OPV, which causes an average of 8 to 9 reported cases of paralytic polio each year, was judged less acceptable due to the absence of indigenous disease and reduced risk of imported infection. Consequently, the ACIP and CDC recommended a transition policy which will increase use of IPV and decrease use of OPV during the next 3-5 years.

2. Why did ACIP/CDC recommend the sequential schedule?

ACIP/CDC recommended the sequential schedule for primary polio vaccination of children in the U.S. because it combines the advantages of both vaccines but reduces the risk of VAPP associated with OPV use. High levels

of individual protection from two doses of IPV should reduce VAPP that occurs in recipients by 95% and may reduce VAPP in contacts, because IPV provides some degree of intestinal immunity, and in immunocompromised persons because of the delay of administering the first OPV to 12 or more months of age. Use of OPV as part of all-OPV or sequential schedules induces intestinal immunity and enhances community resistance to transmission of wild poliovirus if it is introduced. In addition, the number of injections in the second year of life is reduced from what would be required using an all-IPV schedule, making compliance with the overall schedule easier. Finally, this schedule will lead to stocking of both poliovirus vaccines by health care providers, facilitating choice.

3. What is the scientific basis for this change, and why are some charging that the evidence is weak?

About 8 to 9 cases per year of VAPP from OPV use have occurred in the U.S. since 1980 while during the same time there has been no wild poliovirus–associated paralytic disease. Because OPV provides very good intestinal immunity, widespread OPV vaccination has provided an important population barrier to the spread of wild poliovirus in the event of importation. However, due to the success of the global poliomyelitis eradication campaign, wild poliovirus has been eliminated from the Western Hemisphere, and the risk of importation from elsewhere in the world has been dramatically reduced. Use of IPV and OPV in a sequential schedule will provide the benefits of both vaccines while reducing the risk of VAPP. IPV use will reduce the number of VAPP cases by inducing polio antibodies which protect recipients prior to intestinal immunity to prevent wild poliovirus spread until world polio eradication is achieved.

The large majority of experts and organizations recommend a change from the current all-OPV policy (with limited exceptions) which limited choice of parents and doctors to one which increases choice. Such choice will increase use of IPV. Some private provider groups recommend parental/provider choice among three equivalent options. However, for maximum public health benefit, the ACIP has recommended a sequential IPV/OPV schedule, although all-OPV or all-IPV schedules are acceptable alternatives.

4. Do you expect immunization rates to decline because of this decision? Why would you risk that?

Immunization levels among preschool children have increased substantially in recent years despite the adding of new vaccines and more injections. A major parent and doctor education effort will be made to assure smooth implementation of the recommendation and there will be special monitoring of immunization coverage to detect any problems early and take action to solve them.

5. What must parents do now? Does this mean they must make a choice?

Parents should be made aware of the polio vaccines available, alternative immunization schedules, and the basis for polio vaccination recommendations. The benefits and risks of the vaccines for individuals and the community should be discussed so that vaccination is carried out among persons who are well informed. With the new policy, parents will be able to choose among three polio vaccines schedules, all of which provide excellent protection from wild poliovirus infection.

6. Won't this recommendation be very confusing for parents? What are you going to do to explain it to them?

The primary source of information about the IPV/OPV immunization schedule should be the health care provider. Parents can get the "Parents Guide to Childhood Immunizations" brochures and "Vaccine Information Statements" (VIS) that provide information about the vaccine choices, as well as discuss the options with their health care provider.

Information, produced by CDC in different languages and in culturally correct terms, will be available from health care providers, community health centers, and other health-related community-based organizations.

A public awareness campaign is being developed by the CDC to alert parents to changes in the immunization schedule and the importance of discussing those changes with their provider(s).

7. What is the risk of getting polio from OPV?

Overall, about one case of VAPP occurs for every 2.5 million doses of OPV distributed. The risk occurs both in vaccine recipients and contacts of recipients. The risk is greatest after the first dose, and about 1 case in 790,000 first doses administered.

For normal recipients, about one case of VAPP

Use of IPV and OPV in a sequential schedule will provide the benefits of both vaccines while reducing the risk of VAPP.

occurs for every 1.5 million first doses, while for normal contacts (parent or relative) one case is reported for every 2.2 million doses given. After later doses the risk is much smaller, about one case for every 25 million doses for recipients and one for every 18 million contacts.

What is the risk of serions reactions following IPV? There are no serious reactions known to occur following IPV.

8. Why can't a parent select all-IPV or all-OPV?

Parents may choose all-IPV, all-OPV, or a sequential schedule. Schedules using all-IPV or all-OPV are both effective and are acceptable options for preventing poliomyelitis.

9. Will parents' immunization costs go up?

For parents of children covered by the VFC Program, the cost of vaccine will be covered by VFC Program. This is also true for children immunized in public clinics (e.g., health department clinics) and for children who are immunized in the private sector by providers who receive public-purchased vaccine. Providers may ask parents to pay an administration fee but no child will be denied immunization due to inability to pay the administration fee.

Until polio is eradicated in all countries, it is very important that all children be vaccinated for polio.

For Medicaid-enrolled children, provider fees are established by each state Medicaid program with no costs incurred to parent. Costs to parents when their children are covered by private health insurance will vary depending on the type of coverage and amount of co-payment that their policy requires.

10. What if a child has had one dose of OPV? Should the child now receive one dose of IPV and two doses of OPV?

Completion of the series with any of the three options (sequential IPV-OPV, all-OPV, or all-IPV) is acceptable. Because the risk of VAPP from second or later doses of OPV is much lower than after the first dose, it is easiest to complete the series with OPV. However, four doses of any combination of IPV or OPV by 4 to 6 years of age are considered equivalent to a complete poliovirus vaccination series when administered according to their licensed indications for minimum ages and intervals between doses.

11. Isn't IPV less effective than OPV?

No. The IPV that has been used in the United States since 1987 is as effective as OPV. After two doses of IPV, 95% or more of recipients have protective antibody levels to all types of poliovirus, and after three doses more than 99% have protective antibodies.

12. Since no one in the U.S. gets polio anymore, except from the OPV, why should parents continue to vaccinate against polio at all?

Although the last case of paralytic disease due to wild poliovirus in the Western Hemisphere was in 1991, polio continues to occur in many countries of the world. Travelers from countries where wild poliovirus still occurs could reintroduce the wild poliovirus into the United States at any time. Until polio is eradicated in all countries, it is very important that all children be vaccinated for polio, beginning at 2 months of age.

13. Children are getting too many shots these days. If parents want to delay their child's vaccinations because there are too many sticks, should they delay polio vaccination or some other?

Polio vaccination should not be delayed, nor should any of the other childhood vaccines. For parents concerned about the number of injections, the following options to decrease the number of injections at the 2 and 4 months visits may be helpful: (1) schedule the hepatitis B vaccine series at 0, 1, and 6 months; (2) schedule additional visits; and (3) use OPV for the routine series.

14. How safe is this new schedule for polio?

The new schedule is extremely safe. The safety of sequential schedules has been assessed in several hundred study participants and in infants living in countries that routinely use sequential schedules. No serious adverse reactions have been reported from these studies. About 1.5 million Danish children have been vaccinated over a 30-year period using a sequential schedule and no unusual adverse events have been reported.

Why did CDC/ACIP recommend giving the third dose of polio vaccine in the sequential schedule at 12-18 months rather than at 6 months of age as in the current schedule? The ACIP recommended a sequential schedule of IPV at 2 and 4 months of age followed by OPV at 12 to 18 months and 4 to 6 years of age to be consistent with the FDA-approved package labeling of IPV and OPV which are licensed for use in this schedule. As a result, it facilitates harmonization of the three polio

schedules—all-IPV, all-OPV, and sequential. If an all-OPV schedule is selected, the third dose can be given as early as 6 months of age, which is consistent with current public sector practice and previous ACIP recommendation, but is not consistent with the package labeling.

15. Doesn't protection against polio using IPV wear off? Will children be at risk later in life if they get IPV?

Protection from IPV does not wear off, so children will not be at risk later in life if they get IPV now. Studies of IPV in Sweden with vaccines of lower potency than U.S. vaccines show >90% maintained protection against polio 25 years after the fourth dose. A small study of IPV showed excellent antibody persistence during a 4-year follow-up period.

16. What other countries vaccinate their children this way?

Although no other country uses the exact sequential schedule that has been proposed in the U.S., several countries use similar schedules. Denmark, Hungary, Israel, and Lithuania all use schedules that include at least one dose of IPV followed by OPV.

17. Where should parents go for more information?

Parents should go to their provider (physician, nurse, or public health clinic) first. Second, they could call their State Health Department. Third, contact CDC's National Immunization Program (NIP) via the 1-800-CDC-SHOT line (Hispanic Hotline 1-800-232-0233), or the main CDC switchboard.

PUBLIC HEALTH PROVIDERS

18. When will public clinics begin the sequential schedule?

Immunization programs will be able to purchase sufficient amounts of vaccine after the ACIP recommendation has been published, contracts for both IPV and OPV covered by the new schedule have been established, and grant awards made. The time frame for program implementation will vary by state, but is likely to be during the first quarter of 1997.

19. If clinics do not begin the sequential schedule immediately, what should parents who want the sequential schedule be told?

The new schedule will become effective in early 1997. However, parents who would prefer their children to receive the IPV/OPV schedule now may request it from their provider. All clinics should now stock IPV, and provide IPV to those parents who request it. If IPV is not available, parents who want IPV should be encouraged to seek the IPV elsewhere. However, it is important for all children to be immunized on time beginning at 2 months of age, and vaccination should not be delayed. OPV remains a safe and effective vaccine, and failure to be vaccinated on time will lead to increased susceptibility in the population with the risk of outbreaks.

20. When will the new Vaccine Information Statement (VIS) on polio be ready?

It is anticipated that the new VIS on polio will be available around January 1, 1997.

21. Will public clinics be giving parents a choice? Will the decision need to be recorded?

Yes. Public clinics will give parents a choice between the sequential IPV/OPV schedule, all-IPV, and all-OPV. Clinic staff are required to discuss the options available to the parent. In addition, these options are described in the VIS which must be given to parents before the vaccine is administered. In each child's medical record, the clinic is required to verify that the VIS was given to the parent and document the type of vaccine administered.

22. What is CDC's plan for parent education on this change?

Parental education will take place primarily through the local providers using the VIS complemented by direct contact with providers. CDC's NIP will continue to educate providers through training courses such as the satellite programs "Epidemiology of Vaccine- Preventable Diseases" and "Immunization Updates." A revised edition of the "Parents Guide to Childhood Immunizations" and fact sheets will be made available as soon as possible.

In addition, information in different languages and for different cultures will be produced and distributed by providers, community health centers, and health-related community-based organizations. Public service announcements and a general public information campaign will include information that alerts parents to changes in the schedule and the im-

All clinics should now stock IPV, and provide IPV to those parents who request it.

portance of communicating with their provider(s) to make certain that their child is fully immunized.

23. Are all three polio vaccination options effective in preventing poliomyelitis?

Yes. All three options, sequential IPV-OPV, all-OPV, and all-IPV, are highly effective for preventing poliomyelitis in a vaccinated child.

24. When is IPV alone preferred for polio vaccination?

IPV is the only vaccine recommended for immunocompromised persons, their families, and household contacts. An all-IPV schedule may be used when the number of injections is not a concern and is not likely to decrease compliance with the childhood immunization schedule. Some parents may prefer to minimize risk of VAPP.

The CDC and ACIP have strongly affirmed their support of the global Poliomyelitis Eradication Initiative.

25. When is an all-OPV schedule preferred for polio vaccination?

An all-OPV schedule is preferred when the immunization series is started after 6 months of age to enhance compliance with the full childhood vaccination schedule. OPV may be preferred whenever parents or providers decline extra injections needed to provide vaccines recommended during initial visits. Because of enhanced intestinal immunity, an all-OPV schedule may be preferred for children likely to travel to polio-endemic countries to reduce the risk of wild poliovirus infection and subsequent spread.

26. When will combination vaccines be available that will allow fewer injections in the first year of life?

Several combination vaccines are in various stages of development and introduction. Applications for licensure of two vaccines—DTaP/Hib and HepB/Hib—were approved by the Food and Drug Administration on October 2, 1996. Additional combination vaccines may be licensed and available in the future.

Can the newly licensed HepB/Hib vaccine be given at birth? No. This vaccine is not licensed for use in infants less than 6 weeks of age. Although individual hepatitis B vaccines can be given at birth, no current Hib vaccine can be given to infants less than 6 weeks old.

POLICYMAKERS/CRITICS

27. Why didn't CDC/ACIP recommend four doses of IPV, like so many other countries?

Although the risk of reintroduction of wild poliovirus is low, continued use of OPV is needed in the U.S. to provide population-level intestinal immunity against wild poliovirus spread until world polio eradication is achieved. In addition, a sequential schedule will reduce the number of injections needed in the second year of life from that which would be required using an all-IPV schedule, and it will lead to stocking of both poliovirus vaccines by health care providers, thereby facilitating choice.

28. Won't this change undermine the global eradication effort?

No. The CDC and ACIP have strongly affirmed their support of the global Poliomyelitis Eradication Initiative (PEI), which relies on exclusive use for OPV in polio-endemic countries and recently endemic areas. CDC continues to be a major partner in the global initiative and has worked vigorously with the World Health Organization (WHO) to reaffirm the position that OPV is the vaccine of choice and the global standard for elimination, as stated in the WHO's Weekly Epidemiologic Record of December 8, 1995. The ACIP urges that continuing and adequate support be made available to the PEI to achieve the year 2000 global eradication goals.

The proposed change in polio policy is comparable to the historic U.S. decision in the early 1970s to discontinue routine smallpox vaccination because the risks of vaccination outweighed the risk of natural disease in the U.S. at that time. This change in the U.S. policy did not jeopardize the smallpox eradication campaign.

29. If we predict global eradication by the year 2000, doesn't switching to a sequential schedule pose real implementation difficulties which are not worth the effort?

The effort expended now will facilitate transition to an all-IPV schedule. The sequential schedule represents a transition policy which will increase the use of IPV and decrease the use of OPV during the next 3 to 5 years. Continued use of IPV may be needed for several years after the year 2000 until global eradication can be certified.

30. What must occur for the ACIP to support a four-dose IPV schedule?

Exclusive use of IPV in the U.S. would require further progress in global polio eradication and reduced risk of reintroduction of wild poliovirus. In addition, the availability of combination vaccines which reduce the number of injections required to immunize children in the first and second years of life will facilitate changing recommendations to an all-IPV schedule.

31. What are the public health benefits from this change?

This change is expected to reduce the number of VAPP cases by 50% to 75% while still providing a population level barrier to wild poliovirus spread, in the event of introduction, until world polio eradication is achieved. In addition, the change should improve confidence in the childhood immunization program because it is concerned about vaccine safety and providing the safest vaccines.

32. Isn't the cost prohibitive? How much is it, and how do you justify it?

In the public sector, the cost is expected to be only $6.34 more per child at current contract prices. The total increase in cost in the public sector is $15-16 million. We do not believe this cost to be prohibitive, since the change in schedule gives more credibility to the program by installing confidence in people that CDC will make every effort to provide safer vaccines.

33. How will the VFC Program handle this increase? Isn't it true that the VFC Program is a program whose costs are wildly out of control? Why should it stay an open-ended entitlement for the ACIP to decide whatever they want?

As with all other vaccines, each state will estimate the number of doses of both OPV and IPV that they will need to vaccinate the VFC-eligible children in their state. CDC will review these estimates and upon approval will award each state a VFC grant for the needed vaccine. This same process will also be used for vaccine to be purchased under the 317 Grant Program. The additional estimated VFC cost for the new schedule at current CDC contract prices is approximately $11 million, or about $6.34 per child served.

The VFC Program has resulted in substantial cost-savings for state Medicaid programs that more than offset the costs of the new schedule. For example, while the addition of new vaccines to the VFC Program will often result in additional costs, such new vaccines represent the best means of preventing infectious diseases in children while assuring maximum safety. Thus far, California estimated that they saved $21 million in the first year of the VFC Program. These savings were used to fund a State Immunization Registry and other child preventive health programs. States are able to save money by supplying immunization providers with vaccine purchased at the reduced federal price and not paying full price as they did prior to the VFC Program. The VFC Program has also reduced referrals from private providers to public clinics for childhood immunization services. This reduces the burden on public clinics and keeps children in their medical preventive services. Each state uses a multitude of accountability methods to ensure that the VFC Program vaccine is being used for eligible children. The new sequential schedule will also reduce the costs associated with cases of VAPP disease.

The ACIP makes decisions on including newly licensed and approved vaccines in the VFC Program in a vote separate from the initial decision to add the vaccine to the Childhood Immunization Schedule. The decision is made in a public meeting after consideration of data from numerous sources, including public comments.

States are able to save money by supplying immunization providers with vaccine purchased at the reduced federal price.

34. What does this change cost the U.S. taxpayers and insurance companies?

It is estimated that full implementation of the sequential IPV/OPV schedule in the public sector at current CDC contract prices will cost an additional $15-16 million annually.

The additional private sector cost to implement the sequential IPV/OPV schedule is unknown, because the costs of the vaccine sold in the private sector vary considerably. For example, the catalog prices for OPV and IPV are $10.47 and $14.96 per dose respectively; however, the manufacturers may give discounts to managed care organizations or other groups which purchase large quantities.

35. Won't this change put children at risk of not being fully vaccinated because of additional needle sticks?

For parents concerned about the number of injections, the following options to decrease the number of injections at the 2 and 4 months visits may be helpful: (1) schedule the hepatitis B vaccine series at 0, 1, and 6 months; (2) schedule additional visits; or (3) use OPV for

the routine series. As combination vaccines are introduced, we may see reductions in the need for multiple injections during the first year of life.

36. Some critics have said that low-income children will be harmed by this change. What is CDC doing to stop that from happening?

With more injections in the series and, therefore, the possible need to add one or more immunization visits to complete the schedule, we may find that children who are not being seen often enough to complete the current series may fall even further behind. To prevent this, CDC is taking several steps.

*CDC is requiring each immunization grantee to submit a plan to geographically identify populations that are under-immunized and to enhance efforts in these "areas-at-risk." Such enhancements would include full implementation of key strategies such as linkages with the Women, Infant and Children (WIC) Program of the Department of Agriculture, effective tracking and reminder/recalls systems, feedback to providers of information on their immunization practices, and community outreach activities.

*CDC is working closely with vaccine companies and the U.S. Food and Drug Administration (FDA) to accelerate development and licensure of combination vaccines. This will reduce the number of injections and visits needed to complete the vaccination series. CDC is also working closely with vaccine companies and representatives of public health departments to assure that new combination vaccines will be available to public clinics and others using government purchasing systems.

If parents are reluctant to accept an additional injection, use of an all-OPV schedule remains acceptable.

37. Why do we think that polio vaccine coverage will not decrease after implementation of the new recommendation?

First, polio vaccine coverage has risen to unprecedented levels over the past decade. During this same time period, two additional vaccines for infants were added to the childhood immunization schedule, necessitating additional injections or visits. This suggests that parents are willing to accept additional injections and that health-care providers can be educated about the importance of new or alternative vaccination schedules.

Second, available information indicates that when parent are informed about the relative risks and benefits of polio vaccines, most prefer an additional injection to the small risk of VAPP from OPV.

Third, if parents are reluctant to accept an additional injection, use of an all-OPV schedule remains acceptable and is preferred in certain circumstances.

Given these considerations, polio vaccine coverage is unlikely to decrease to the levels present in the mid-1980s, when in the face of higher level of importation of wild poliovirus from the Americas, no cases of polio due to wild type virus occurred in the United States. Program efforts to educate and motivate parents and practitioners can be enhanced to prevent decreases in polio vaccine coverage during implementation of this new recommendation; however, we have no other strategy to prevent permanent paralysis and death due to VAPP.

38. What data do we have that show an increase in immunization has taken place in an underserved community?

There are data from several studies which indicate that increases have occurred. These data also point out the importance of key strategies to improve immunization coverage. The studies evaluated interventions: (1) linking WIC and immunization service programs; (2) assessing the performance of providers in immunizing patient populations; and (3) immunization reminder/recall systems.

In Chicago, linkages between the WIC Program and the Immunization Program increased immunization coverage by 38% (from a baseline of 37% to 75%) compared with a concurrent control group, whose coverage increased only 4% (from 49% to 53%). The intervention included (1) assessment of the immunization status of WIC-enrolled children, and (2) either referral to an immunization provider or immunization at the WIC clinic.

Several reminder/recall strategies have been tested. A study in North Carolina showed a 20% increase in coverage by use of a reminder/recall system. A CDC-funded intervention study conducted in Rochester, N.Y., also showed an increase of 20 percentage points in coverage by combining outreach services with a reminder/recall system. In that study, the intervention was most effective among the most impoverished children (a 32% increase for uninsured children and a 28% improvement at a clinic caring for the poorest children).

Georgia implemented a statewide intervention using Clinic Assessment, Feedback, and Information Exchange (AFIX). This intervention resulted in a doubling of immunization coverage, from 40% to 80%. All areas of the

state benefited from the intervention. Similar improvements in coverage have been seen in other states implementing this intervention.

39. The schedule is too confusing; how can you expect parents to keep track of these changes?

Providers will be the primary source of information about immunization schedules, for they are responsible for ensuring that parents are made aware of the next scheduled visit. Working together, parents and providers can help make appropriate decisions about childhood vaccinations based on the latest scientific information and the needs of the child.

40. Is CDC providing additional grants to states to cover the increased cost of IPV?

CDC will not be able to increase 317 grant funding for this change without an increase in the appropriation for the National Immunization Program. Grantees will need to find the additional dollars for the 317 portion of IPV within existing budgets. Since the VFC Program is an entitlement, VFC Program funding will be available to allow purchase of IPV for all VFC-eligible children.

41. Why did it take so long for CDC to make this recommendation? The Institute of Medicine recommended this change in 1988.

The 1988 Institute of Medicine report recommended that a change in policy be considered only when combination vaccines (DTP-IPV) were available. However, dramatic progress in the global polio eradication campaign in subsequent years required re-evaluation of this decision. In addition, CDC needed to solicit input from the lay, public health, medical, and scientific communities prior to making this change, and needed to consider a wide range of programmatic and scientific issues before embarking on a major change in vaccination policy.

If you have any questions or comments regarding the above information, please contact Edd D. Rhoades, MD, MPH, or Phyllis Brown, RN, Oklahoma State Department of Health, Child Health and Guidance Service, 405-271-4477. J

Providers will be the primary source of information about immunization schedules.

The State of the State's Health—
A Report from the Oklahoma State Board of Health

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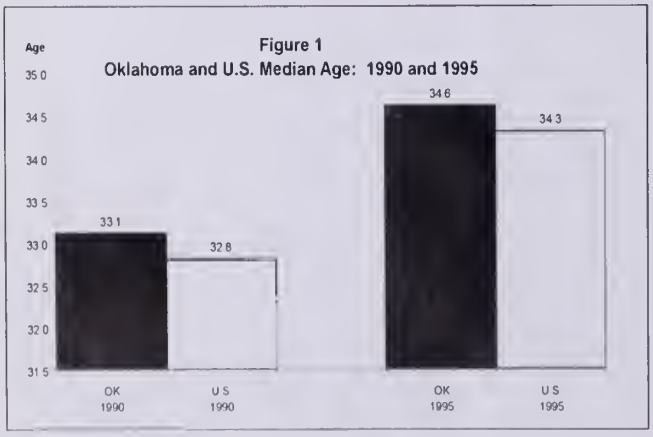
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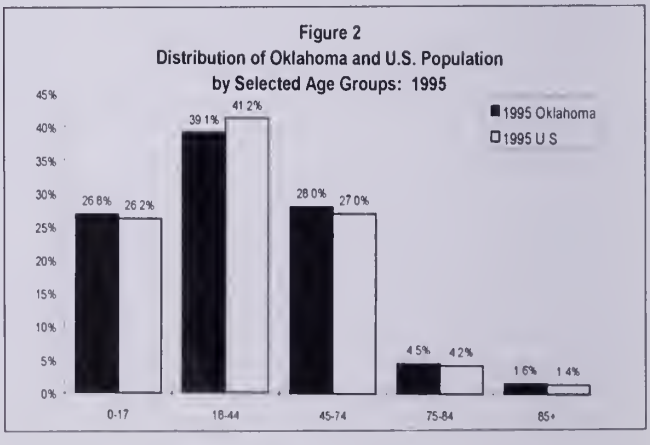
Frank W. Merrick

The State Board of Health presents its first annual report on *The State of the State's Health* to the citizens of Oklahoma. Working with the Oklahoma State Department of Health, our purpose is to provide an assessment of the general health status of Oklahomans. Collecting, analyzing, and using health data are essential components for public health. The Institute of Medicine's 1988 report, *The Future of Public Health,* thoroughly supports this position. Assessment functions are a particular responsibility of a health department.

This report compares public health indicators for Oklahoma with those of the nation, as a means of selecting issues that have serious implications for maintaining and improving the health status of Oklahomans. We may suggest certain conclusions, but remedies must come from a much broader base than either the State Board of Health or the Oklahoma State Department of Health.

As the nation and Oklahoma approach the year 2000, public health agencies have renewed their efforts to exam-





ine the health status of its citizenry. The State Board of Health has adopted 56 representative or sentinel objectives for *Healthy Oklahomans 2000*. These are intended to be general indicators of progress and are integrated into the Department's priority setting process. Our aim is to improve the health status of Oklahoma citizens.

Oklahoma Economic and Population Characteristics

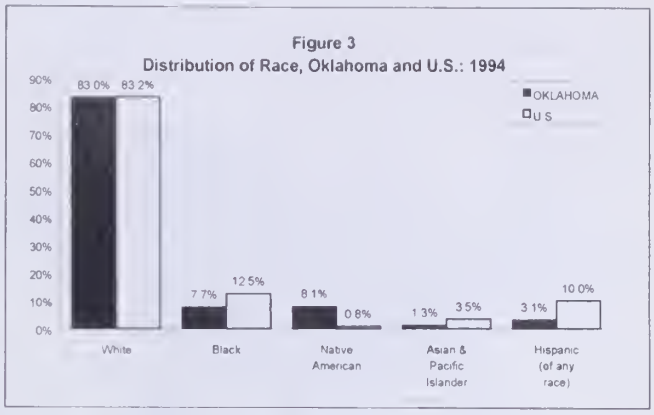
Overall, Oklahoma has an older population. In 1995, the median age of Oklahomans was 34.6 compared to 34.3 for the U.S. (Figure 1). The proportion of the population in Oklahoma 85 years and over is greater (1.60%) than the U.S. proportion (1.38%) (Figure 2). Between 1990 and 1995, this group increased from 45,000 to over 52,000. In the future, the proportion of Oklahoma's population will be increasingly older and Oklahoma will see increased demands on services for the elderly as we enter the 21st century.

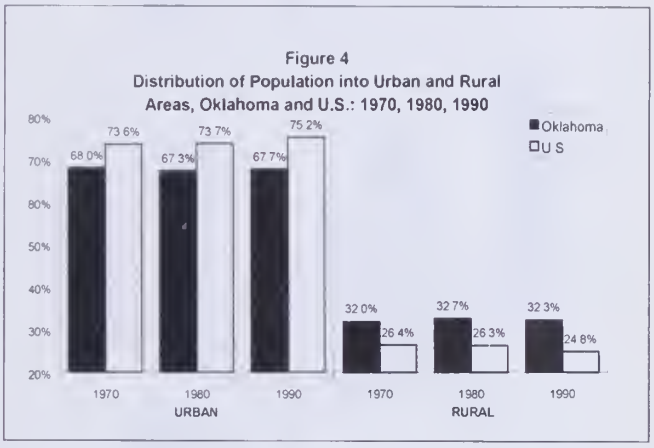
Other distinctive characteristics of Oklahoma's population include its racial and ethnic breakdown, the percentage of the population living in rural areas, and the percentage of the population with incomes below the poverty level. Oklahoma's Native American population is 8.1% of the total, the highest percentage of any state in the continental United States. African Americans comprise 7.7% of our population; Hispanics, 3.1%; and Asian & Pacific Islanders, 1.3%. Larger numbers of Hispanic people are migrating into the state (Figure 3). We must anticipate these changes and be prepared to meet the health needs of different ethnic and racial groups.

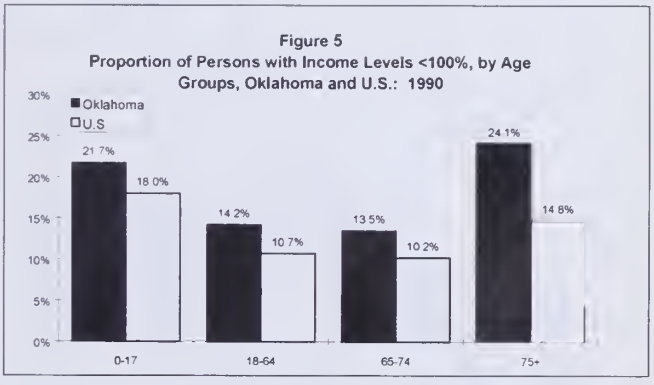
More than 32% of Oklahomans live in rural areas compared to 24.8% for the U.S. (Figure 4). Available health care services tend to be clustered in urban areas. Some rural counties in Oklahoma do not have doctors who deliver babies or hospitals that allow deliveries. We need to assure access to quality health care services for all Oklahomans, including the large percentage of Oklahoma's population that live in rural areas.

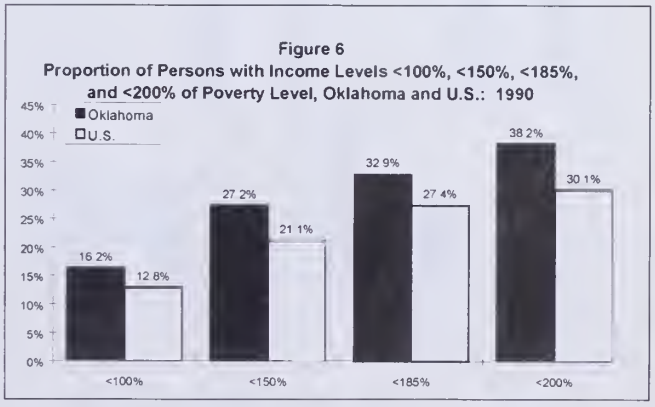
Per capita personal income tor Oklahomans is $18,580 versus $23,208 for the U.S. This is about 80% of the U.S. average. For each age group, Oklahoma has a higher percentage of people in poverty compared to the U.S. (Figure 5). In 1990, the percentage of Oklahomans whose 1989 income was less than 100% of the poverty level was 16.2% (Figure 6). By 1995, this percentage had increased to 17.1%, while the U.S. percentage had increased to 13.8%. Also, the percentage of those whose 1989 income was less than 150% of the poverty level is 27.2% compared to 21.1% for the U.S. (Figure 6). Many Oklahoma citizens fall into an income level that is too high to qualify for health care assistance through Medicaid, yet they are unable to afford health insurance or basic health care services. In study after study, poverty is correlated with serious health outcomes.

How should we address this problem? How can Oklahoma afford to provide assistance to those without any





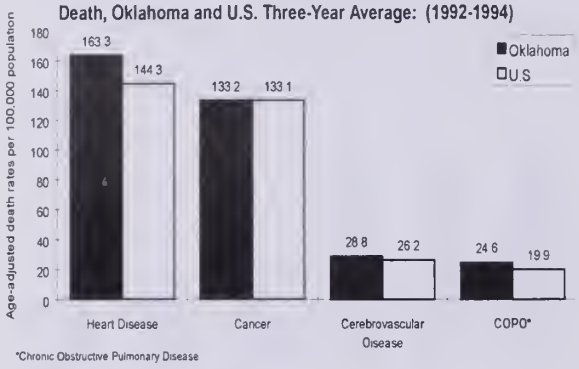




type of health care coverage? Our county health departments certainly cannot expand their services enough to meet these increasing needs. These are serious questions. We simply cannot ignore those who do not have access to health care. If we do, all of us will bear a much larger burden in the not-too-distant future.

In summary, the Oklahoma population is older, poorer, and has a larger percentage of its population living in rural areas where health care is more scarce. These factors are often predictors for poor health. For Oklahoma, as we shall see, the health of Oklahomans is becoming poorer and is worse than the U.S. for a number of factors.

Figure 7
Age-Adjusted Death Rates for Four Leading Causes of Death, Oklahoma and U.S. Three-Year Average: (1992-1994)



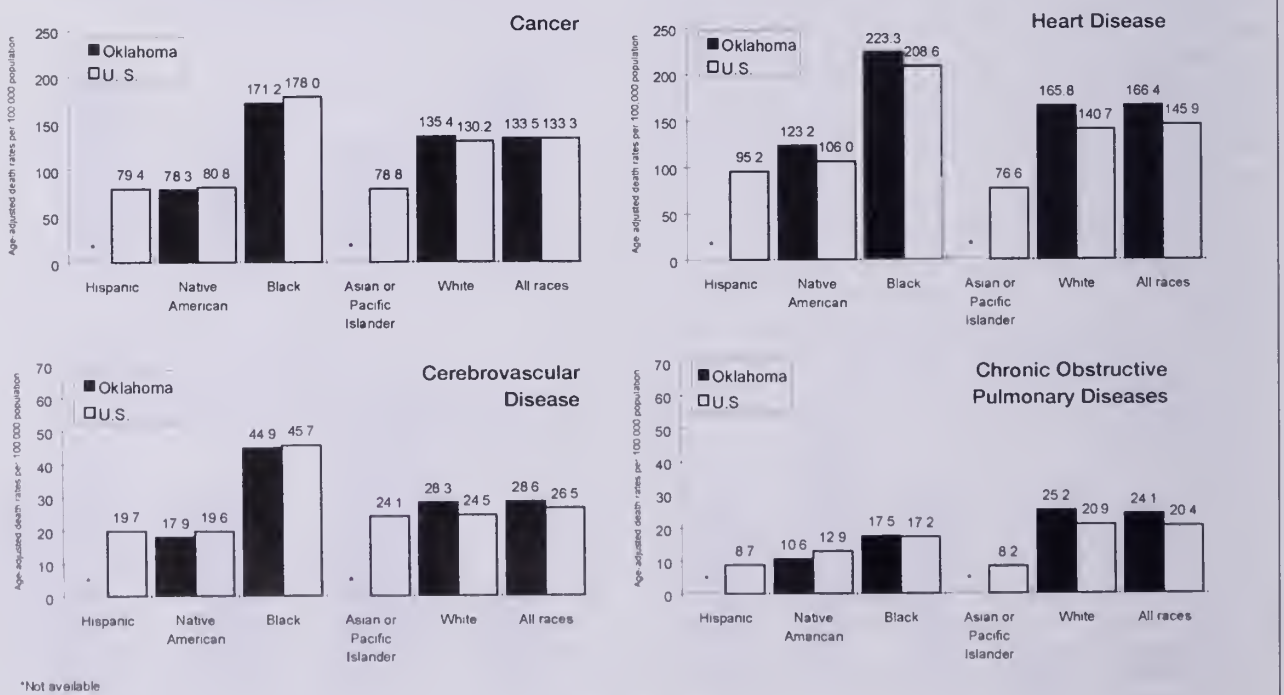
Public Health Status Indicators

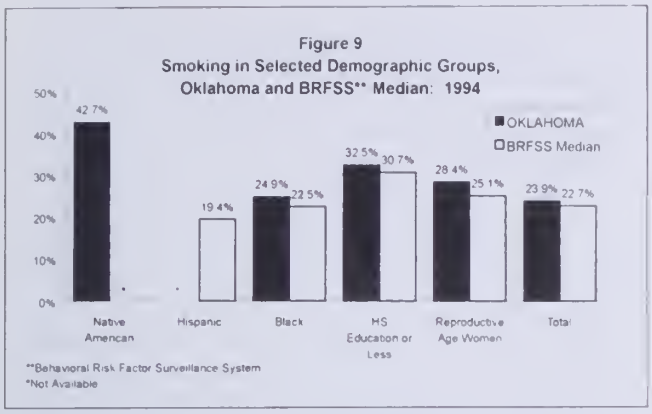
Americans are living longer. Average life expectancy is now almost 80 years for women and almost 73 years for men. This trend is expected to continue to increase. However, it must be considered that as the average life span increases, the numbers of elderly who need assistance will increase. Additionally, it must be seriously considered that in 15 years (the year 2010) the baby boom generation will begin to retire, and as they age, produce increased demands for assistance.

In 1995, the age adjusted death rate per 100,000 for the U.S. was *502.9* and life expectancy was *75.8* years, the highest ever. *But in Oklahoma, the age adjusted death rate was 541.2, considerably higher than the national rate.*

When looking at the well-being of our state, there are specific key health status indicators, four major categories, that can be considered: chronic diseases, injuries, childhood health concerns, and infectious diseases. We begin by looking at the leading causes of death for Oklahoma and the nation (Figures 7 and 8). After adjusting for the effects of age-related illnesses, the top four leading causes of death for both Oklahoma and the U.S. are heart disease, cancer, cerebrovascular disease, and chronic obstructive pulmonary diseases (COPD). Unfortunately, Oklahoma

Figure 8
Leading Causes of Death, Oklahoma and United States: 1991-1993





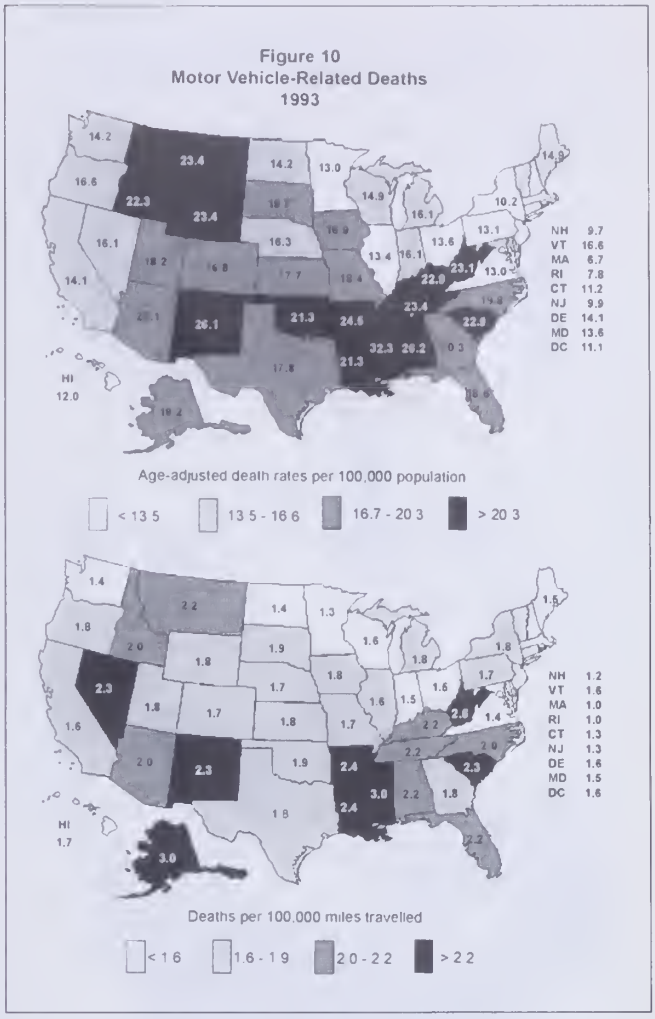
has some of the highest rates in the nation for these disease categories.

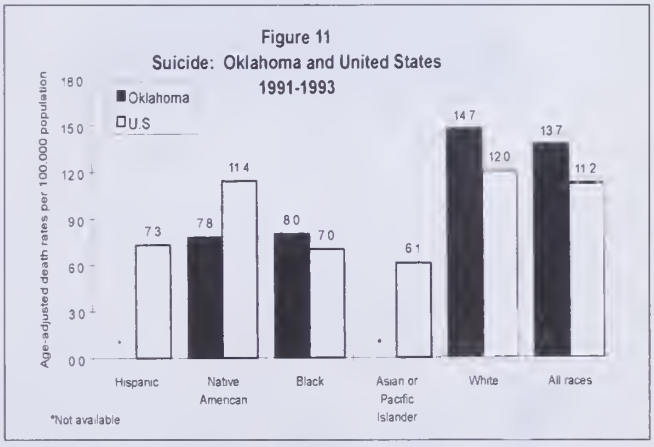
Why is Oklahoma overburdened with these chronic conditions? One cause is Oklahoma's use of tobacco products. We have one of the highest rates of smoking in the nation (Figure 9), particularly among our women. Excessive deaths due to heart disease, cancer, stroke, and COPD can be linked directly to smoking. Other factors include poverty, as already mentioned, limited access to health care, obesity, nutrition, and sedentary life style.

The fifth leading cause of death in Oklahoma and the U.S. is unintentional injuries. Of particular concern are deaths due to motor vehicle accidents (Figure 10). Again, we do not compare favorably with other states. We also have higher rates than the national average for deaths due to suicide (Figure 11). Among our white population, rates of homicide are also higher (Figure 12).

Because of these high rates of deaths due to heart disease, cancer, stroke, COPD, and traumatic injuries, Oklahoma has excessive rates for years of potential life lost (YPLL) (Figures 13 and 14). YPLL is a measure of premature death. It is defined as the number of years lost between the age of birth and age 65. Oklahoma is losing its most precious resource, our citizens, at an alarmingly higher rate than the nation at large.

Our hope for the future is our children. That is why the Board of Health and the Oklahoma State Department of Health take childhood health concerns so seriously. Currently, one in two children born to Oklahoma residents is the result of mistimed or unintended pregnancy. Studies convincingly demonstrate that such children are at greater risk than those born to women who intended their pregnancies. Another measure of the potential for good health starting in infancy is the level of prenatal care received during the first trimester of pregnancy (Figure 15). Unfortunately, Oklahoma lags behind the rest of the nation in this regard. If we are serious about taking care of our children—our future—we must insure that pregnant women have access to and receive quality prenatal care, especially in the first trimester. In Oklahoma, between 1991 and 1993, a greater proportion of women, across all races except for Native Americans, did not receive prenatal care in the first trimester, as compared to the U.S.





Another important measure that helps us define our hope for the future is births to teenagers (Figure 16). Often, pregnancies among young females ages 15-19 are un-

intended. Births resulting from unintended pregnancies can have detrimental and long-lasting effects for both the teenage female and the newly born infant. *Oklahoma has significantly higher birth rates than the U.S. average for 15-to- 19-year-old females. In 1995 in the United States, 13.2% of all babies born were born to women under 20. In Oklahoma, the figure was 17.0%.*

In Oklahoma, 26% of 2-year-old children are not adequately immunized. This is unacceptable. Increased attention is needed to improve immunization rates of Oklahoma's children, thereby protecting them against serious and deadly diseases that are preventable with vaccines. Also in Oklahoma, only an estimated 58% of community water systems are fluoridated compared to the *Healthy People 2000* target of 75%. Efforts to increase the number of communities that have fluoridated water systems need to be aggressively pursued since fluoridation has been proven safe and effective in reducing dental disease, especially in children.

Rates of infectious diseases also help us understand the health status of our state. Currently, our rate of infectious hepatitis A is the highest in the nation, over seven times higher than the national rate. Rates of tuberculosis in our Native American population in 1995 were 40% higher than the national rate, and the rate of drug resistant tuberculosis has risen to unacceptable levels (Figure 17). We must remain vigilant in our prevention, education, and immunization efforts in order to protect our citizens from the spread of infectious diseases. We all need to learn once again that hand washing prevents the spread of such diseases; for example, hepatitis A.

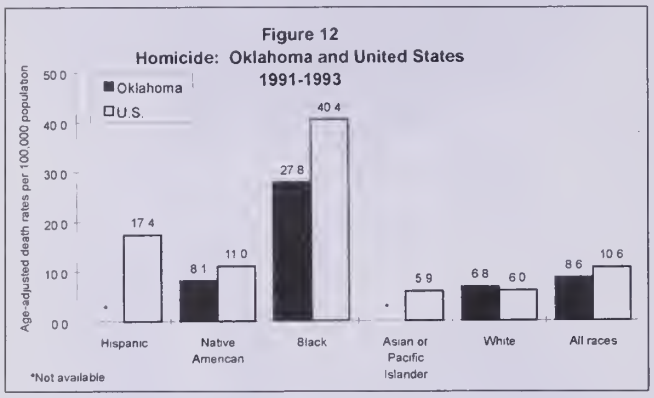
One of the biggest public health concerns nationally is the potential for new and emerging infectious diseases. Oklahoma is no exception. Ensuring a strong state public health infrastructure with state-of-the-art public health laboratories and disease investigation systems is critical to prevent the spread of all types of infectious diseases, common or newly emerging.

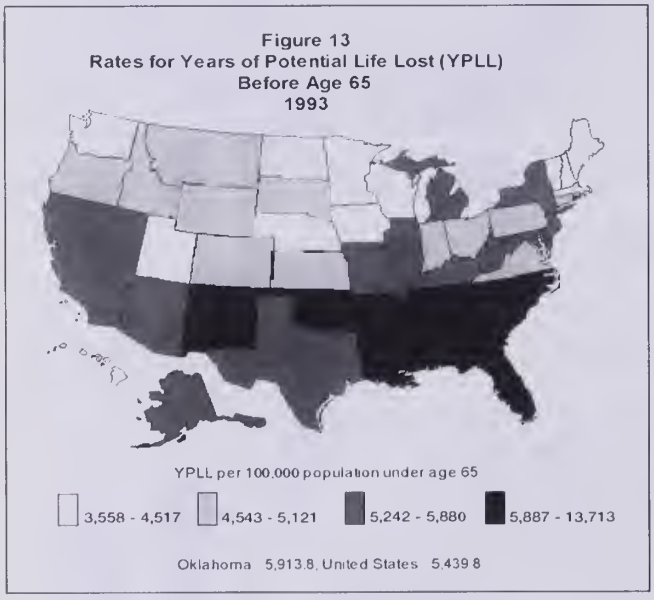
Clearly, based on this review of public health status indicators, Oklahoma's overall health has room for improvement.

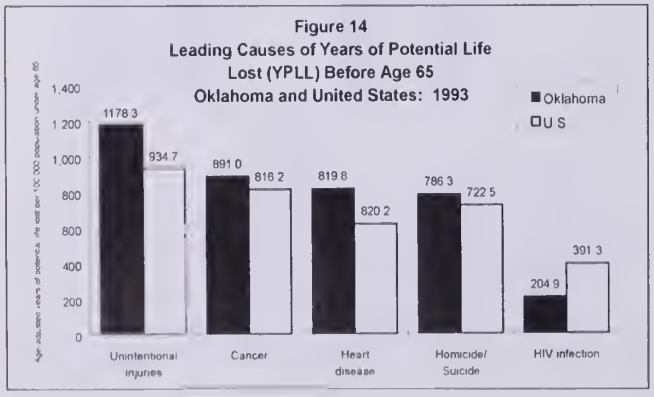
Oklahoma's Medically Uninsured

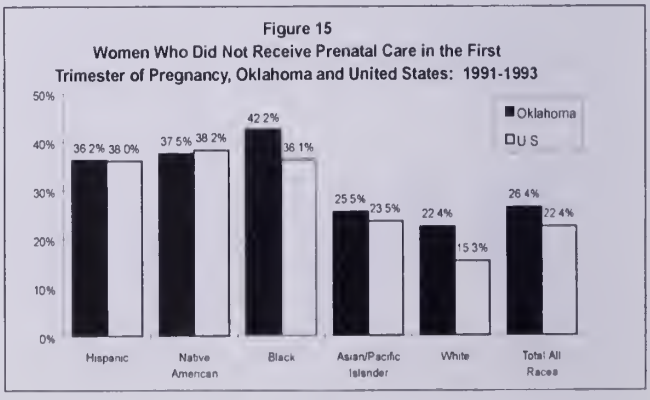
Oklahoma's medically uninsured may be one of the most important barriers to improving our people's health. The numbers of uninsured are testing the limits of the ability of providers of last resort to supply needed services, whether rural or urban hospitals, public health clinics, or health practitioners in the private sector.

The estimated medically uninsured population under









age 65 in Oklahoma is 600,000, or 21.0% of our population (Figure 18). This estimate is the seventh highest among the 50 states and the District of Columbia. In 1994, it was estimated that 21.6% of Oklahoma's children were uninsured, 3rd highest in the nation and an increase from the 17.6% figure in 1993. The dentally uninsured population is even higher.

Some believe that Medicaid will take care of the uninsured. This is not the case. In Oklahoma, Medicaid serves approximately 13% of the state's population while 21% of the population still has no health insurance coverage at all. Many of the uninsured do not qualify for Medicaid either because they are not eligible to receive state assistance or because they do not meet other financial or categorical standards. Based on data published by the Urban Institute, only 44% of the families with incomes below the federal poverty level in Oklahoma were covered by Medicaid during the period 1990-1992.

The average profile of a patient who comes to a local free clinic operated by one of Oklahoma's largest hospitals, is a single mother with three or four children and two to three jobs, none of which provide health insurance. Such a person earns about $15,000 a year, which means she cannot qualify for Medicaid.

Has the number of uninsured in Oklahoma reached a plateau? Some experts predict the numbers will be with us for some time—either because we do not recognize the problem or do not solve it. In fact, the number of medically uninsured are likely to increase in the next few years, as will the difficulty of their obtaining needed care. Several factors support these predictions.

1. In this era of a market-driven health care delivery system, physicians and hospitals are less financially capable of providing charity care. Cost shifting has been the primary technique for hospitals to provide medical care to the uninsured. Market pressures from managed care organizations, insurance companies and employers are forcing health care providers to cut costs. Hence, cost shifting is a less viable option.

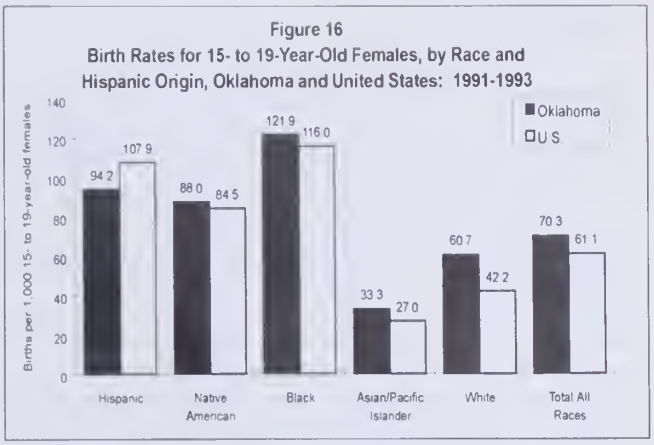
2. The rapidly changing health care delivery system, driven by competition, may also reduce the system's capacity to provide charity care. Hospital mergers, the development of multi-hospital systems and joint ventures between hospitals and physicians frequently create systems that do not serve the medically uninsured in substantial numbers.

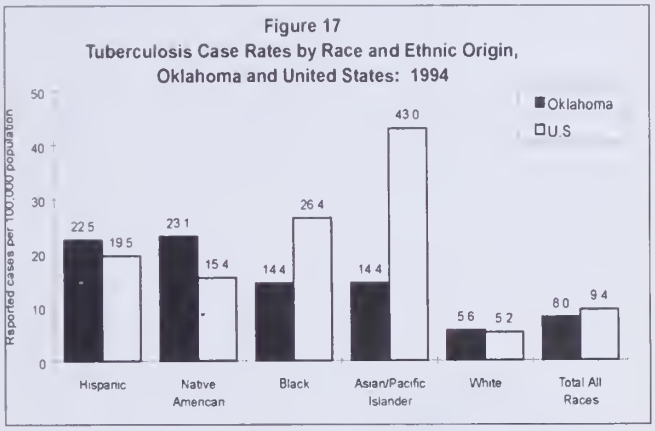
3. Poverty and low incomes are almost synonymous with Oklahoma's uninsured population. The Census Bureau reports that in 1995, Oklahomans on average saw their income decline and the number of families living in poverty increased. Median household income was down 5.2% from 1994. Meanwhile, the percentage of Oklahoma households living in poverty in 1995 rose to 17.1%, up from 16. 1% the previous year.

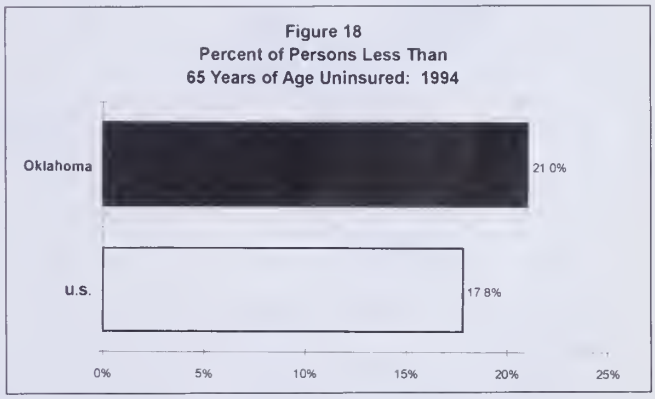
4. Traditionally in Oklahoma, most of the uninsured population are employed. In 1992, the most recent data available, 74% of the uninsured were full-time employees, 15% were employed part-time and 11% were unemployed. Nationally, the percentage of the population having health insurance through an employer is decreasing.

5. Finally, the traditional providers of last resort: public hospitals, community health centers, neighborhood clinics, public health departments, and primary care physicians (especially those in rural areas) are being threatened by eroding revenue streams from Medicaid services and other efforts at the state and federal level to contain costs.

(continued)







Conclusions

Unnecessary Disability and Loss of Life

Oklahoma has the unfortunate distinction of being above national rates for most of the key public health status indicators. This means that our citizens are overburdened with disability and unnecessary death. Oklahoma cannot afford the many years of productive lives that are being lost.

Uninsured

Augmenting the problems of our excessive disease and death rates is the continuing high number of uninsured people in the state. For those without health insurance, public or private, and with no other means to pay, basic health care is neglected. Often, the uninsured will not seek health care until an emergency occurs or a simple disease becomes serious. When this happens, everyone loses.

Neglect of Health Care for Children

Our most vulnerable citizens are also our youngest. Children are at risk for numerous infectious diseases and unintentional injuries. Poor health care among the young predicts a higher rate of chronic disease among the working adult population.

When considering plans for improving Oklahoma's health status, the continued rise of health care costs above the rate of inflation must be considered. This report does not address this issue specifically.

Recommendation

OCIHO - Oklahoma Consortium for Improving the Health of Oklahoma

This first annual report on *The State of the State's Health* makes one recommendation. As we approach the new millennium, we recommend the formation of a consortium that would look seriously at the issues raised in this report and from a broad base develop solutions for improving Oklahoma's health status. The Oklahoma Consortium for Improving the Health of Oklahoma (OCIHO) would include representation from health professionals, state leaders and policy makers, representatives from chambers of commerce, and concerned citizens. The State Board of Health looks forward to working with you toward *Creating a State of Health.*



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Enid's David M. Selby, MD, assumes presidency of OSMA on April 26

David M. Selby, MD, will assume the presidency of the Oklahoma State Medical Association at an Inaugural Reception and Dinner held on Saturday, April 26, 1997, at the Southern Hills Marriott in Tulsa during the Annual Meeting of the association. Dr. Selby will become the 92nd president of the association. He succeeds Tulsa urologist David L. Harper, MD.



Dr. David M. Selby

A native of Enid, Dr. Selby earned both his Bachelor of Sciences ('57) and Doctor of Medicine ('61) degrees from the University of Oklahoma. Following an internship (1961-62) at the University of California Medical Center in San Francisco, California, he returned to Oklahoma where he completed a residency in general surgery at the University of Oklahoma Health Sciences Center in 1966.

From 1966 to 1968, during the Vietnam Conflict, Dr. Selby served on active duty as a general surgeon with the United States Air Force Medical Corps and was stationed at Clark Air Force Base, Republic of the Philippines.

Dr. Selby established a medical practice in general surgery in his hometown of Enid in 1968 where he continues to practice. He has been a member of the Oklahoma State Medical Association since that time.

Since beginning private practice, Dr. Selby has taken an active role in organized medicine not only with his local medical community but also at the state and national levels. He served as president of the Garfield County Medical Society in 1978. From 1994 to the present, he has been a member of the OSMA Board of Trustees and was elected vice-president of the association in 1995 and president-elect in 1996. In 1992, he was elected an alternate delegate from the OSMA to the House of Delegates of the American Medical Association, a position he held for 4 years. For the past 15 years, since 1982, he has been a member of the Board of Directors of the Physicians Liability Insurance Company (PLICO) and has served as secretary-treasurer of PLICO since 1995.

Dr. Selby is certified by the American Board of Surgeryand is a Fellow of the American College of Surgeons and a member of the American Society of General Surgeons. He currently serves as president of the Oklahoma Surgical Association.

Dr. Selby has held teaching positions at the University of Oklahoma Health Sciences Center in both the Department of Surgery in Oklahoma City and the Garfield County Department of Family Practice in Enid where he received the Outstanding Faculty Award for 1989-90 in recognition of his contributions to the Family Practice Residency Program.

Active participation in church and local civic groups and institutions is an integral component of Dr. Selby's community involvement. He has served as both deacon and elder in the First Presbyterian Church in Enid. He is a member of the Enid Chamber of Commerce and Rotary Club. He is a past chairperson of the Enid/Phillips University Partnership fund raising campaign and is a longtime member of the University of Oklahoma Associates.

Dr. Selby and his wife, Carolyn, have two children, sons David and Bruce.

Oklahoma adopts more stringent laws governing telemedicine practice

Oklahoma recently became one of a growing number of states to adopt laws regulating the medical treatment of patients via electronic communications from outside the state. However, while other states have adopted comprehensive telemedicine legislation, Oklahoma opted to modify its "practice of medicine" definition to include telemedical procedures and added a requirement that healthcare providers from outside the state wanting to perform such procedures in Oklahoma must first obtain an Oklahoma medical license. Amendments to the licensure requirements, which became effective last November, now make it extremely difficult for out-of-state healthcare providers to do business in Oklahoma, and also create added risks for in-state healthcare providers.

The current licensure statutes include provisions that impose liability on healthcare providers who aid in the unlicensed practice of medicine in Oklahoma. Under these revised statutes, individual healthcare providers, hospitals, or telemedical facilities expose themselves to potential liability by seeking on a regular basis the telemedical consultation of an out-of-state healthcare provider who is not licensed in Oklahoma.

The American Medical Association's House of Delegates has officially recommended that physicians be licensed in any state in which their patients are located during consultation or treatment. Making its position clear, Oklahoma has adopted laws saying you must obtain a license to practice medicine in Oklahoma if you plan to consult on a regular basis via electronic communications within its borders.

Anesthesia in a Glass

Substance abuse is a society-wide epidemic with an estimated 8% of the population having an addiction problem and many more being considered recreational users. Over the past few years, a disturbing trend in the increased use of two notably dangerous drugs, Rohypnol (flunitrazepam) and gamma-hydroxy-butyric acid, has been documented. The comparatively low cost of these drugs and their reputation for being "safe" make them extremely attractive to young people as party drugs.



Flunitrazepam is a benzodiazepine with pharmacological effects mirroring those of diazepam but is 8 to 10 times more potent. It is used in other countries as a preanesthetic medication and for the short term treatment of insomnia but is neither manufactured nor approved for any medical use in the United States. In March 1996, U.S. Customs banned the importation of the drug even by private citizens.

Usually seen as a white, scored 2 mg tablet, the street names for the product include "ropes," "roofies," "roach-2," "R-2," and the "Forget Pill." It has a synergistic effect with alcohol, producing disinhibition and amnesia, that has linked it to "date-rape" cases across the country. Drug abusers report using flunitrazepam as a remedy for the depression that sometimes follows a stimulant "high" and to enhance the effects of low quality heroin.

Treatment is supportive and the same as for other benzodiazepine overdosage. The use of flumazenil in management has yet to be established in that it may cause seizures in patients with cyclic antidepressants as a co-ingestant and may induce withdrawal in benzodiazepine addicts.

GHB (gamma-hydroxy-butyric acid), an endogenous metabolite of gamma-aminobutryic acid (GABA), is present

(continued)

Association grateful to exhibitors and sponsors of '97 Annual Meeting

The OSMA thanks the exhibitors and sponsors who have demonstrated their support of Oklahoma physicians by participating in the 1997 OSMA/OSMAA Annual Meetings.

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Animal rabies significantly increasing in Oklahoma: 27 cases confirmed this year

Many zoonotic diseases exhibit a cyclical pattern of incidence influenced by ecological factors and infection rates in animal reservoirs. Besides being of interest for surveillance, these trends or patterns can be effectively applied for preventive medicine purposes. With a disease like rabies, prevention is our only option—so the warning bell needs to be rung—animal rabies is on the rise in Oklahoma.

Thus far in 1997, 27 cases of animal rabies have already been confirmed by testing at the state public health laboratory. This compares to 4 cases in 1996 and 8 cases in 1995 at the same time of the year. *Total* annual cases of animal rabies ranged from 32 to 39 for 1994, 1995, and 1996. In geographical areas where the skunk is the rabies reservoir, a cyclical peak incidence of rabies tends to occur every 6 to 8 years. Although the increase in animal rabies this year is disturbing, it was predictable (Fig. 1).

The majority of the 1997 cases have been concentrated in a south central corridor of the state (Fig. 2). Of the 27 cases, 22 have been skunks, 3 dogs, 1 Shetland pony, and 1 case was a bovine. Generally, it is the cases in domestic animals that require the most rabies postexposure prophylaxis to their human contacts. For example, nine persons required antirabies treatment after nonbite exposure to one of the rabid dogs. At a median cost of $1500 for a postexposure series of rabies immune globulin (RIG) and five doses of human diploid cell vaccine (HDCV), the total health care costs associated with this dog approximated $13,500.

The three basic tenets of rabies prevention continue to be (1) stray animal control, (2) vaccination of companion animals, and (3) avoidance of wild animals, especially as pets. Animal rabies vaccines are currently available for use in dogs, cats, horses, ferrets, sheep, and cattle. This is an effective and integral way to establish a barrier of protection between wild animal rabies and human exposure. However, viral shedding periods have only been conclusively determined for dogs and cats. Therefore, a 10-day rabies observation period supervised by a licensed veterinarian is presently an option only for dogs and cats involved in a bite to a human. All other species at high risk of transmitting rabies, particularly skunks, raccoons, bats, foxes, and coyotes will require immediate euthanasia and rabies fluorescent antibody testing of the brain tissue. Consultation about animal bites prior to initiating postexposure immunizations can be obtained by contacting the Com-

(continued)

Poison Control Center *(continued)*

in most mammalian tissues and has been hypothesized to have a role as a neurotransmitter. It has been explored clinically since 1960 as an anesthetic agent but is currently limited to investigational use for the treatment of narcolepsy and associated syndromes in the United States.

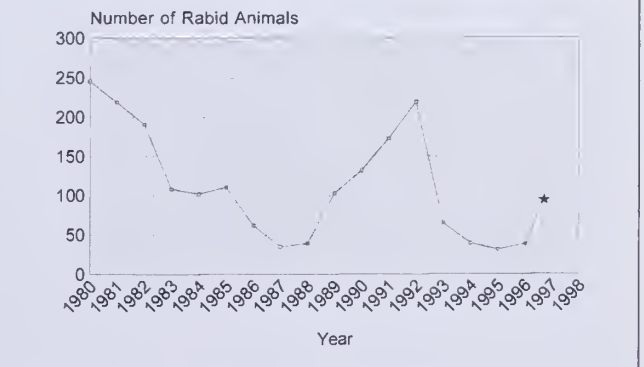
The sodium salt—as powder, granules, or clear liquid—has been marketed under the names Somatomax, Gamma-OH, Oxybate, and others—illicitly at gymnasiums and health food stores where it is promoted as a steroid alternative for body-building and as a "fat-burner," nutritional supplement, and "natural sedative." It was banned by the Food and Drug Administration (FDA) in 1991 after reports of adverse effects in individuals using weight loss supplements containing GHB.

Illicit use of GHB often involves oral doses of one teaspoonful (2.5 grams or 35 mg/kg in a 70 kg adult) dissolved in water or alcoholic drink. Response to low doses of GHB is unpredictable. Narcolepsy studies with 30 mg/kg reported effects including abrupt onset of sleep, myoclonic movement, and visual disturbances. GHB overdose (over 50 mg/kg) leads to coma or near coma, bradycardia, and bradypnea. Emesis is common. Treatment is supportive, and no clinically useful GHB antagonists have been identified, although naloxone reverses some of the effects in animals. When GHB is the sole ingestant, duration of coma is usually short with complete resolution within eight hours, although aggressive supportive care is required.

GHB is not detected by routine drug screens and does not appear to alter other laboratory values drastically. This lack of distinctive diagnostic markers makes GHB overdose difficult to identify and all other causes of acute unresponsiveness must be ruled out when patients present as GHB overdoses.

For references, or for other information about poison control or the Oklahoma Poison Center, please call 271-5454 in the Oklahoma City area or 1-800-POISON-1 in the remainder of the state.

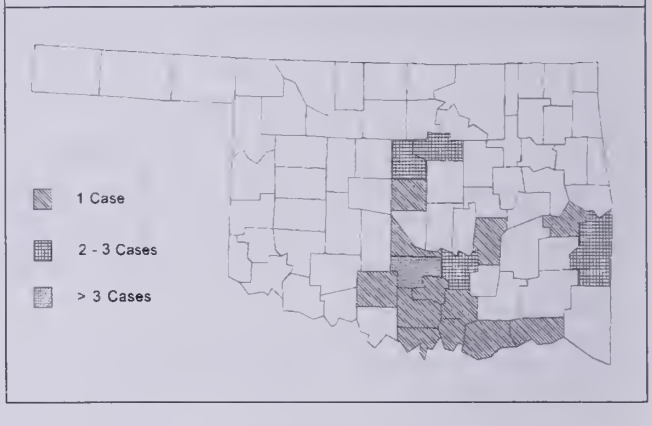
Figure 1. Animal Rabies in Oklahoma 1980-1996



municable Disease Division of the Oklahoma State Department of Health. Regard is given to the potential for previous exposure to a rabies vector, current health status and behavior of the animal at the time of the bite, and the epidemiology of rabies in that species. Small rodents (mice, gophers, prairie dogs, moles, hamsters, squirrels, etc.) and lagomorphs are considered to be at very low risk of transmitting rabies. Unless there are unusual circumstances about the bite incident, rabies testing or postexposure immunizations are almost never indicated following a small rodent or rabbit bite. Most other warm-blooded mammals will require testing.

Although human rabies deaths in the United States are rare, the epidemiology of human rabies appears to be changing. Of the 18 indigenously acquired cases since 1980, 15 have been attributed to a bat variant of rabies virus.[1] Of greatest concern is that in most of these cases, there was no recognized bite or saliva exposure to a bat. In light of this fact, more conservative recommendations are being deliberated regarding potential exposures with bats. If a bat is found in the room where a person is sleeping, or if a bat is found in close proximity to a small child, intoxicated person, or mentally challenged person, rabies testing should be performed. If the bat is unavailable for testing and the possibility of a bite can not be ruled out, then rabies postexposure prophylaxis should be considered.

Fig 2. Distribution of 1997 Animal Rabies



Moreover, it is important to recommend preexposure prophylaxis to persons with occupations or hobbies that put them at increased risk of wild animal contact and inapparent exposure to rabies.[2] This group includes veterinarians, veterinary technicians, wildlife officers, animal control personnel, wildlife rehabilitators, cave explorers, bridge inspectors, and laboratorians in animal diagnostic laboratories. Rabies prophylaxis immunizations may also be indicated for persons who travel for a long period of time to foreign countries with a high rate of canine rabies, such as India, Nepal, Phillippines, Bangladesh, Ecuador, and southern Mexico. Preexposure immunization does not eliminate the need for postexposure prophylaxis if a recognized rabies exposure occurs, but the postexposure regimen is greatly simplified.

The last human case of rabies in Oklahoma occurred in 1981. By a heightened awareness of the animal rabies activity and communication of rabies prevention measures by health care providers to their patients, it is hoped this statistic will not be repeated.

For consultation or additional information regarding rabies issues, please contact Mike Crutcher, MD, MPH, State Epidemiologist; Lauri Smithee, MS, Director, CDD; or Kristy Bradley, DVM, MPH, Epidemiologist, CDD, at (405) 271-4060.

Prepared by: Kristy K. Bradley, DVM, MPH, Veterinary Epidemiologist, CDD, OSDH.

1. Drenzek CL, Noah DL, Smith JS, Rupprecht CE, Krebs JW, Fekadu MA, Childs JE. Human rabies in the United States, 1980-1996. Epidemiologic and Clinical Features. Proceedings of the 7th International Meeting, Advances Towards Rabies Control in the Americas; 1996 Dec 9-13, Atlanta, Georgia USA; p.82.
2. Centers for Disease Control and Prevention. Recommendations of the Immunization Practices Advisory Committee (ACIP). MMWR 40 (No. RR-3) 1-19, 1991

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Are you interested in no longer dealing with billing, collecting, overhead and the complexities of managed care? Our primary objective is to provide comprehensive care, promoting wellness among the American Indian families we serve.

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The hospital is no longer an Indian Health Service facility, but is now managed by the Chickasaw Tribe. Great strides are being made to provide high quality care. This 53-bed facility has a large outpatient service and a defined population of over 30,000 patients. This progressive health system is constantly enhancing services, utilizing new technology and stressing continuing education.

Please call Jamie Spence, Professional Recruiter 800-851-9136 or fax resume to 405-421-4512.

Questions about diabetes and insurance coverage

Diabetes effects some 160,000 Oklahomans or 8.6% of the total adult population. Of this number, only about 4.3% of adults are aware of their disease and are under physician management (BRFS, 1992-5). The prevalence rates for Oklahoma exceed the national average of 3.9%. For 1995, diabetes was the only chronic disease with rising mortality rates. Table 1 reflects the prevalence of diabetes in the United States, Oklahoma, and its bordering states.

The complications of diabetes; retinopathy, cardiovascular disease, nephropathy, neuropathy, and amputations of the lower extremities cost Oklahomans about $1.3 billion annually. To reduce the burden of diabetes, there is a need to prevent the acute and chronic complications of diabetes by maintaining optimal glycemic control. Two recent scientific studies document the need for optimal glucose control, reflect 40% to 60% reduction in the complications of diabetes, and show significant economic savings (DCCT Research Group, *New England Journal of Medicine*, 329:977-986, 9/30/93, and Ohkube Y et al, *Diabetes Research and Clinical Practice*, 28;1995: 103-117). The use of appropriate tools (equipment, supplies, and medications) with diabetes self-management training and appropriate medical management provide the methods for optimal control.

Effective November 1, 1996, insurance polices in Oklahoma began providing reimbursement and benefits coverage for certain equipment, supplies, insulin, other prescription drugs, certain providers services, and self-management training as treatment for type I, type II, and gestational diabetes. During the 1996 Legislative period, HB 3021 was passed providing for insurance reimbursement. The Board of Health passed emergency rules governing the health aspects of the legislation during its November 1996 meeting.

The following are common questions and answers related to the legislation and rules:

Infectious diseases: an increasing health threat

Once thought ta be an the verge of elimination as a public health threat, infectiaus diseases continue to be the warld's leading cause af premature death. In the United States, infectious diseases are the third leading cause af death. April 7, 1997, was designated as Warld Health Day, with the theme "Emerging Infectiaus Diseases: Reduce the Risk."

A combination of factors have cantributed ta the re-establishment of infectiaus diseases as serious health threats. Changes in food processing and handling have lead to outbreaks af *E. coli* O157:H7 and salmanellasis. Lyme disease and Hantavirus pulmanary syndrame are the result af papulatian grawth and shifts that have disturbed natural habitats and increased human exposure ta previausly unknawn, dangerous micraarganisms. Increased air travel and the glabalizatian of world cammerce allaw potentially disease-carrying products and peaple ta crass U.S. barders every day. Lastly, due ta misuse and averuse, ance-dependable antibiotics such as tetracycline and penicillin are lasing their ability ta combat camman infectians.

Oklahama has not been immune ta the increasing incidence and appearance af several infectious diseases. Hepatitis A reached epidemic levels in July af 1994, and Oklahama remains the state with the highest rate af Hepatitis A cases in the cauntry. In a twa-week period in 1996, a McAlester nursing home reparted 12 cases af highly antibiatic-resistant *streptococcus pneumoniae* which resulted in 4 deaths. An increasing number of drug-resistant strains of tuberculasis have made a broader drug pratacal necessary for initial treatment. Hantavirus pulmonary syndrame (HPS) was first recognized in 1993 in the Four Corners area of New Mexico and Arizana. It is an extremely serious viral respiratory disease with a 50% martality rate that is spread via inhalatian of the virus in aerasalized radent saliva ar excreta. In November of 1996, Texas Caunty reported the first case af HPS in Oklahoma.

Lyme disease, a tick-barne illness, was first described in the mid-1970s in Lyme, Connecticut. Since then, Lyme disease has appeared throughaut the United States, with 42 cases reparted in 24 Oklahama caunties in 1996 alane.

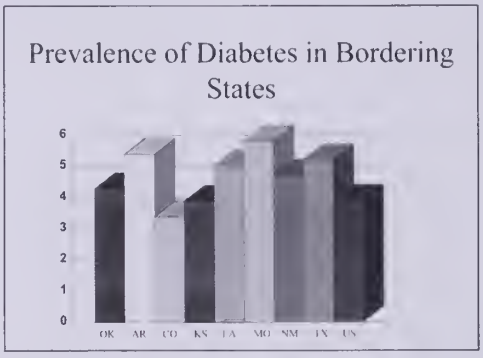
Warld Health Day highlights the necessity af warking tagether, as a state and as a natian, ta help control infectiaus diseases acrass the glabe far the health af all people. The American Assaciation for World Health has pravided ten simple ways ta help prevent infectiaus disease:

1. Keep immunizations up ta date far children, adults, and pets.
2. Wash your hands often.
3. Be aware af what yau eat, and be careful how you prepare it. Dan't drink untreated water when hiking or camping.
4. Use antibiatics exactly as prescribed.
5. Repart ta yaur dactor any infectian that daes nat get better after you take a prescribed antibiatic.
6. Be cautiaus around all wild animals and damestic animals that are not familiar to yau.
7. Avoid areas of insect infestatian and use insect repellents an skin and clothing when in areas where mosquitoes and ticks are camman.
8. Avoid unsafe, unpratected sex and injected drug use.
9. When traveling aut af the country, get all recammended immunizations.
10. When sick, allaw yourself time ta heal and recaver.

Far further information contact: Michele L. Caté, MPH, Epidemiologist, Cammunicable Disease Division, Oklahama State Department af Health.

Diabetes *(continued)*

1. Were all Oklahomans with insurance covered on November 1? No, only persons with certain types of insurance policies have coverage. Policies offering health benefits are adding the diabetes benefits upon renewal or reissue of each plan. Coverage and eligibility for benefits began November 1, 1996, for state employees or persons covered by state health insurance policies. As employers or individuals negotiate benefit plans or contracts, these benefits must be provided by the insurance plan/policy as of November 1, 1996. Policies that are NOT adding these benefits are those policies where the "benefit structure is the subject of collective bargaining affecting people in more than one state." Persons *not* covered include persons covered by Medicare and Medicaid.



2. If the person has Medicare benefits, will this affect coverage? No, Medicare is a federal program, and therefore persons with Medicare coverage are not affected. State legislation can not dictate a change in this program. To influence Medicare, national legislation is needed. National coverage similar to Oklahoma's law has been lobbied for and is receiving strong support, but as of now has not been passed. This bill has been introduced again for this congressional session.

3. Can a person with Medicaid have this benefit? Yes, if the person is covered under a health maintenance organization and the benefit package is a part of the negotiated benefit package with the Oklahoma Health Care Authority. However, not all persons covered by Medicaid have access to health maintenance organizations.

4. How does the individual get reimbursement for diabetes supplies? The physician must write a prescription for each product, drug, or service. These items or services must be medically necessary. *Insulin at the present time is not a prescription item. For an individual to receive reimbursement, insulin must be prescribed.*

5. What products and equipment are included in this legislation? Medical "equipment" includes non-disposable or durable equipment used to treat diabetes, and medical "supplies" means disposable supplies. Examples of products and equipment included for reimbursement are: blood glucose monitors and supplies for the glucose monitor including the test strips, lancets, and lancet device; urine testing strips for ketones; insulin and the delivery methods to administer the insulin; insulin pumps and the supplies for external insulin pump therapy; oral agents, which have Food and Drug Administration (FDA) approval for controlling blood glucose levels, and agents which pr event complications of diabetes such as hypertension or hyperlipidemia medications; and podiatric appliances which prevent complications. The products must be prescribed by a physician and deemed medically necessary to prevent the complications of diabetes.

6. Is diabetes education covered? Yes, diabetes self-management training is a covered service. The education must conform to the standards adopted by the Board of Health. "Diabetes self-management training" is instruction provided by a qualified diabetes educator in multiple settings which enables persons with diabetes to understand the daily diabetes management process as a method of avoiding frequent hospitalizations and complications. The diabetes self-management process includes daily and lifelong skills, problem-solving strategies, and risk reduction lifestyle changes to effectively delay or prevent both acute and chronic complications. This education can be conducted in the hospital, in a clinic, as home health care, or in a group or class, or as an individual session. This service must be prescribed by a physician and deemed medically necessary to prevent the complications of diabetes. There are three basic opportunities for diabetes education: at the time of diagnosis, any time during the course of the disease when there is a major change in the person's condition, and periodic refresher courses.

7. Does nutrition therapy qualify? Yes, medical nutrition therapy recommendations and instruction are covered if the consultation is prescribed by the physician and the service is provided by a registered, licensed dietitian. Weight reduction programs are not covered reimbursable benefits.

8. What other services qualify? Diabetes services include health care provider services to monitor the condition of the person with diabetes and includes health care provider visits and podiatric consultation.

9. If your patients have questions about policy coverage, whom should they contact? Individuals should check with their own insurance carrier for specific information about their plan and its health benefits package. If you or your patients have a complaint(s) involving a health maintenance organization, contact the OSDH, 405-271-6868 or 1-800-811-4552. Any complaint involving any other insurance plans may be submitted to the Oklahoma Insurance Commissioner's office at 405-521-2828.

10. What does the person with diabetes and no insurance do? High risk pool insurance became available to Oklahomans on July 1, 1996. Contact the Oklahoma Insurance Commissioner's office at 405-521-2828 for information related to coverage, application forms, and costs.

For more information about diabetes legislation or rules, diabetes standards, diabetes self-management training standards, or diabetes equipment or supplies, contact the Oklahoma State Department of Health, Diabetes Prevention and Control Program, Teresa Neese Harbolt, RD/LD, CDE, Diabetes Educator and Chronic Disease Dietitian, or Adeline Yerkes, RN, MPH, Chief, Chronic Disease Service, at 1-888-669-5934. ɾ

Deaths

Jess Hensley, MD
1925 - 1997

OSMA Life Member Jess Hensley, MD, retired pathologist, died March 25, 1997. DR. Hensley was born in Carthage, Missouri, and received his medical degree from the University of Oklahoma in 1959. His residency was at University Hospital in Oklahoma City. He practiced a number of years in Oklahoma City, where he was a clinical assistant professor at his alma mater. Dr. Hensley was a member of the American Society of Clinical Pathologists.

Robert Edward Pollnow, MD
1946 - 1997

Tulsa oncologist and internist Robert E. Pollnow, MD, died March 2, 1997, in Tulsa. A native of Rockford, Ill., Dr. Pollnow earned his medical degree at the University of Illinois College of Medicine in Chicago. He completed residency training at Baylor College of Medicine and followed that with a fellowship at M.D. Anderson Cancer Center. Dr. Pollnow was a U.S. Navy veteran.

Classifieds

Classified ads are 50 cents a word, with a minimum of $25 per ad. A word is one or more characters bounded by spaces. Box numbers will be assigned upon request and will add 6 words to the total. *Payment must accompany all submissions.* Orders will NOT be accepted via telephone or fax. Mail ad with payment to OSMA JOURNAL, 601 West I-44 Service Road, Oklahoma City, OK 73118. Deadline is the first of the month preceding the month of publication.

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GREEN COUNTRY EMERGENCY MEDICINE staffs low and medium volume emergency rooms in northeast Oklahoma. Actively seeking full- or part-time physicians, GCEM seeks BE/BC primary care providers. We are especially interested in recruiting internists at this time. For information about salary and benefits, please call 918-456-8562 or page 918-643-7721.

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In Memoriam

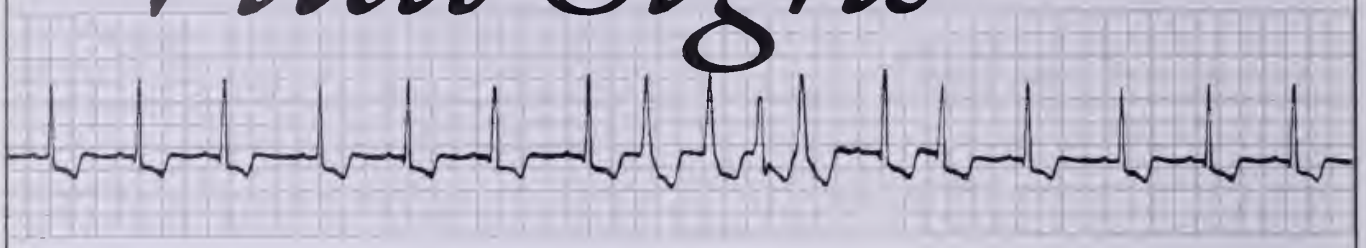
1996

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Kerri Dianne Williams, MD	January 9
Emanuel Nathan Lubin, MD	January 11
Ted Samuel Edward Lewis, MD	January 31
Elbert Henderson Shuller, MD	January 26
Earl I. Mulmed, MD	February 2
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William Jackson Dowling, MD	February 13
Theodore Sherman Williams, MD	February 22
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Robert Moran Herlihy, MD	July 24
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Bruce Hunter Brown, MD	August 4
Arnold Gordon Nelson, MD	August 26
Ollie Wayne Dehart, MD	August 28
Leslie Arvin Arneson	September 26
Bertram Edward Sear, MD	October 4
Walter Wieker, Jr., MD	October 11
Ellis Edwin Fair, MD	October 21
William Nathan Oxley, MD	October 22
Jesse Day Shipp, MD	October 28
William Manning Moore, MD	November 28
Charles Leonard Benson, MD	December 8
William Norris Harsha, MD	December 17
Ronald S. Barlow, MD	December 21

1997

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Ronald W. Gilchrist, Jr., MD	January 19
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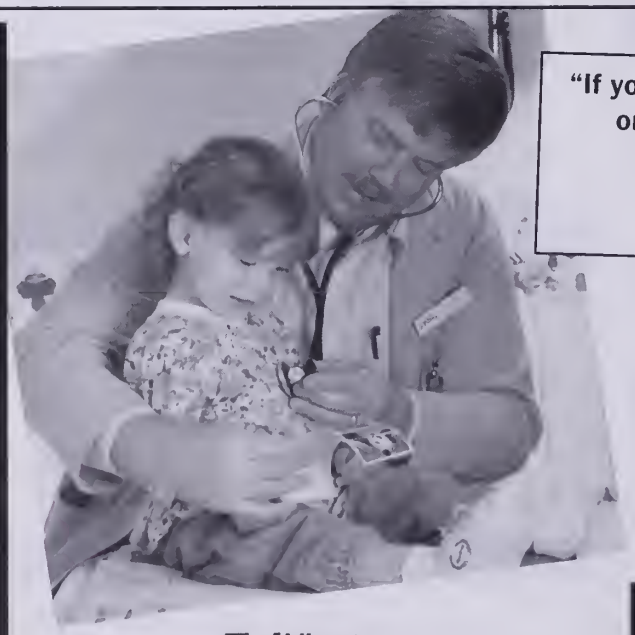
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THE LAST WORD

■ **William K. Walker, MD, retired Marlow general practitioner,** has been named this year's recipient of the Wyeth-Ayerst Award for Community Service. Dr. Walker established the Southside Medical Clinic in Marlow in 1981 and practiced there until its closure at the time of his retirement. Dr. Walker will receive his award at the Opening Session of the OSMA House of Delegates at its Annual Meeting in Tulsa this month.

Other awards to be presented at the Annual Meeting include those of the University of Oklahoma Medical Alumni Association. Named as Physician of the Year - Academic Medicine is Gordon H. Deckert, MD. Physician of the Year - Private Practice is Norman A. Cotner, MD. John C. Coburn will receive the Amicus Medicinae (Friend of Medicine) award.

■ **Breaking from other big tobacco interests, the Liggett** Group, Inc., agreed late last month to a settlement with 22 attorneys general representing 22 states (including Oklahoma) in tobacco lawsuits. The company admitted that tobacco is addictive and cancer-causing and has agreed to put warning labels on cigarette packs. It will also surrender some 30 years' worth of incriminating legal documentation that shows the industry has known all along the potential harm of tobacco and nonetheless targeted the nation's teenagers in its marketing efforts. Liggett agreed to pay $25 million up front plus 25% of its pre-tax profits over the next 25 years and in turn will be protected from future tobacco lawsuits.

The AMA demanded that "the remaining tobacco companies follow suit and accept responsibility for the harm that they have caused the American public."

■ **Physicians residing in key legislative districts are meeting** with Oklahoma House and Senate members serving on committees that will effect medical issues. OSMA's message concentrates on scope of practice issues and the OSMA legislative agenda approved by the Legislative Council and sponsored by the OSMA. OSMA lobbyists Lynne White and Vickie Rankin have indicated that the visits initiated thus far have been very effective. They are getting positive feedback from the legislators regarding the key contact visits.

To date the following physicians have met with their respective legislators: Edward W. Allensworth, MD, Vinita, (key contact volunteer Donna F. Warren, MD, Vinita) with Rep. Joe Eddins; Edward N. Brandt, Jr., MD, Oklahoma City (key contact volunteer Jeffrey T. Shaver, MD, Edmond), with Rep. Opio Toure; Chester L. Bynum, MD, Norman, (key contact volunteers Drs. Jack J. Beller, William C. McCurdy III and Stephen G. Lindsey, Norman) with Rep. Laura Boyd; John A. Robinson, MD, Shawnee (key contact volunteers Drs. Cynthia A. Alsup and Eldon V. Gibson, Shawnee), with Rep. Bob Weaver; Bruce L. Storms, MD, Chickasha (key contact volunteer James E. Winslow, Jr., MD, Chickasha), with Sen. Bruce Price; and Kenneth W. Whittington, MD, Bethany (key contact volunteers Drs. Ralph B. Hester III and James B. Wise, Oklahoma City), with Sen. Howard Hendrick.

■ **A six-member delegation from Oklahoma recently** attended the AMA's 25th Annual Leadership Conference in Philadelphia March 16-18. The national conference was hosted by the city in which the AMA originated 150 years ago. The meeting provided physicians an ideal background for discussion of leadership in medicine throughout the past 150 years and of how medicine's leaders will handle the challenges that will face them in the future. Conference sessions focused on in-depth discussions of the changing medical education environment, the role of ethics in medicine today, care decisions at the end of life, antitrust, managed care, and the 1997 agenda of the 105th Congress.

Attending from Oklahoma were J. Christopher Carey, MD, president, Oklahoma County Medical Society; William A. Geffen, MD, president-elect, Tulsa County Medical Society; Jay A. Gregory, MD, AMA delegate and federation chair; Robert D. McCaffree, MD, and Mary Anne McCaffree, vice-president, OSMA; and Kathleen A. Musson, acting executive director, OSMA.

■ **OSMA Associate Director Lyle R. Kelsey has resigned** his position with the OSMA effective May 1, 1997, to become executive director of the Oklahoma State Board of Medical Licensure and Supervision. Kelsey has a total of 18 years of service with OSMA. He succeeds Carol Smith, who retired in March after 25 years of service at the licensure board. The board licenses over 25,000 professionals in the state of Oklahoma, including MDs and physician assistants (PAs).

■ **Robert A. Breedlove, MD, Stillwater dermatologist, was** one of four physicians featured earlier this year in *Dermatology World* (Jan. '97) because of their humanitarianism and contributions to their communities. For the past three years, Dr. Breedlove has been a regular volunteer at Stillwater Community Health Clinic, attending to patients with general medical problems. For 30 years he has been a football and basketball official for junior and senior high school and college games. And currently he is developing a summer outpatient medical clerkship for an aspiring high school student.

■ **Additional corrections for the *1997 OSMA Directory of Physicians*: Patrick A. McKee, MD,** and **Sylvia Lopez, MD,** both of Oklahoma City, should be shown as **members** of OSMA; their *non-member* designations in the directory are incorrect. Please note these changes in your directory.

Directory corrections should be sent to the OSMA, Attn: Judy Lake, 601 West I-44 Service Road, Oklahoma City, OK 73118. Corrections will be made in the membership databank and published in the JOURNAL. J



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EDITORIAL

Communication Is a Difficult Art 175
R.V. McINTYRE, KINGFISHER

PRESIDENT'S PAGE

Banner Year at the State Capitol 177
D.M. SELBY, ENID

SCIENTIFIC

Headache Fear 179
H.A. SAADAH, OKLAHOMA CITY

Herniated Intervertebral Dise Without Pain 185
W.A. GORMAN, J.A. HODAK; PHOENIX

SPECIAL

It Takes a Revolution: Restoring the Balance in Health Care 191
PERCY WOOTTON, AMA PRESIDENT-ELECT, ADDRESSES THE OSMA HOUSE OF DELEGATES ON APRIL 25, 1997

Report of the Ad Hoc Committee on the Oklahoma Health Care Authority and SoonerCare 195

NEWS

Who gets copies of medical records? 197... Telemedicine: Oklahoma adopts strict new licensure rules for medical treatment employing electronic communication, 201

DEPARTMENTS

Poison Control Center, 196... Letters, 199... Deaths, 203... Classifieds, 203... In Memoriam, 204... Alliance, 211... The Last Word, 212

ABOUT THE COVER

Readers by now may recognize the work of William S. Harrison, MD, Chickasha, whose home grown and photographed blossoms, like this magnolia, have graced so many JOURNAL covers.

Cover art production by Greg Gilpin, Graphic Art Center, Inc., Oklahoma City.





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Communication Is a Difficult Art

Traditionally, the principle reason for being of the JOURNAL has been to provide a forum for the publication of scientific articles of interest to Oklahoma physicians. In the remote past, there was also a need for a "minutes of the meeting" published records of the transactions of the medical society to be communicated to interested physicians.

In that remote past we can surmise that the medical society itself served such a different purpose as to be nearly unrecognizable today. It seems likely that our frontier physician forefathers made confraternity mainly for intellectual cross-pollenization, a sort of exchanging of the yeast so that the bread of scientific medicine might raise. Nowadays the specialty societies exchange the intellectual yeast, and the Oklahoma State Medical Association tries to defend the profession from the circling sharks.

This altered function of the OSMA may lead to a different reason for being for the JOURNAL, or for a reconsideration of the philosophical basis of the publication. Since human societies are constantly changing, and evolving toward an unknowable future, periodic reevaluation of the status quo is needed for a logical response to change. Further, change is not necessarily progress, as some changes signal the onset of deterioration. Thus we cannot embrace "change" for its own sake, but we logical humans must try to translate unrequested change into growth or improvement, if possible, and minimize the ill effects if necessary.

An unwelcome change has been thrust upon the JOURNAL, and this unwanted change is the necessity for a bimonthly publication schedule. This necessity has arisen because of a dearth of submitted manuscripts that simply requires less frequent publication in order to maintain a palatable admixture of advertisement, news, and scientific content. While the JOURNAL has undergone several "dry spells" in submissions before, and then experienced spontaneous relief without attributable cause, the present "drouth" has become so serious and prolonged that the Editorial Board has recommended a bimonthly publication schedule until the rate of submissions improves.

The editors of the JOURNAL recognize that there is a multiplicity of forces that increase the difficulty of writing scientific articles at this time. However, the JOURNAL has always used a wide variety of material with the threshold criterion that it be of interest to Oklahoma physicians. Clinical review articles, case reports, medical history pieces, and therapeutic progress reports are eagerly sought as well as the more formal—and difficult—reports of research advances. Also, the JOURNAL actively publishes articles dealing constructively with the medical profession's interaction with the world and the government. The JOURNAL will continue to be an open forum for discussion of topics of interest to Oklahoma physicians.

Information exchange has entered new dimensions in the electronic world we live in today, and reading the printed word is no longer the prime method of obtaining data. The technical soundness of the telephone, radio, television, videotapes, and the personal computer has irretrievably altered the role of printed text in informing us and in the exchange of data. However, the printed page is not obsolete, and it seems doubtful that electronic signals will ever replace the near-permanent record achieved by widely printed material. Since we can peruse them and archive them, there will always be a place for journals, books, and newspapers in our cultural life.

Communication theory and journalism have been vastly affected by the development of the computer "worldwide web," and our medical society's communication program should be integrated in all dimensions to this new reality. Part of the Journal should be also available on the OSMA web page on a regularly updated basis, and authentic clinical public service information should be cogently presented on the OSMA home page.

Active input of all OSMA members to the Editorial Board and to the Internet Committee is sought in order that this time of change will become a positive factor in the future of the OSMA.

Ray V. McIntyre, M.D.

An editorial is a column of personal opinion that may or may not reflect the official position of the OSMA.



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Banner Year at the State Capitol

As I write this page, the summer months have begun and the legislative session has ended. Our efforts during the past session have been extremely energetic, and as a result productive. These favorable outcomes are a result of the efforts provided by the Chairman of the OSMA Council on State Legislation, Edward N. Brandt, Jr., MD, and OSMA lobbyists Vickie White Rankin and Lynne White. Their endeavors, combined with the prompt response from physicians to *"Calls to Action"* have resulted in ***all*** OSMA-sponsored bills remaining intact and signed into law. These bills include the following:



- Two limited coverage bills i.e., the ***"Drive-Through Delivery"*** bill which closed loopholes in the 1996 law which continued to allow insurance companies to deny adequate coverage for hospital stay; and the ***"Breast Cancer Protection Act"*** which requires insurance companies to cover not less than 48 hours of inpatient care following a masteetomy;
- The ***"State Trauma System Development"*** bill which provides for voluntary participation by hospitals in the development of a Trauma Center identification program by the Oklahoma State Department of Health and an ***"Informed Consent"*** bill which allows the next of kin to approve experimental treatment for a patient when the patient is incapacitated, without going through the lengthy and costly legal process to establish legal guardianship through the courts and;
- An ***"Immunizations"*** bill which states that all insurance plans which provide benefits for a family member of the insured shall include coverage for immunizations for each child from birth through eighteen years without being subjected to co-pay or deductibles and;
- The OSMA's ***"Fairness in Managed Care Act"*** which was signed by the Governor this last week. This bill encompasses major reform provisions to protect both doctors and patients involved in HMO health plans, including adequate and understandable explanations for enrollees regarding what is and is not covered by the plan; improved definitions of *urgent care* and *emergency* to adequately cover the need for treatment in urgent and emergency situations, as well as a gag clause provision prohibiting insurers from preventing communications regarding treatment options, etc., between physicians and patient. The bill also contains language mandating that businesses of 50 or more employees, which offer only an HMO, must also offer a point-of-service option to enrollees.

The passage of these bills will affect the health of the people of the State of Oklahoma and beyond. For instance, OSMA has forwarded a resolution to the American Medical Association requesting the AMA endorse laws requiring insurance companies to provide coverage for immunizations with no co-pays or deductibles; and that the AMA urge states without such laws to adopt similar legislation.

This, as well as three other Oklahoma resolutions, will be considered at the June Annual Meeting of the AMA House of Delegates in Chicago. As you know, the American Medical Association meets twice a year to consider such resolutions and then set policy and recommendations that approach a consensus of representatives from the entire nation. In addition to the Annual June Meeting, there is an Interim Meeting of the House of Delegates in December. As a result, the "AMA Policy Compendium" has become the benchmark of excellence in medicine and science. For your information, the new 1997 edition is available for purchase from the AMA.

The Oklahoma delegation to the AMA enjoys a national reputation for effectiveness. Due to an increase in OSMA enrollment and by being a unified state, we send a total of 16 Delegates and Alternate Delegates, and the OSMA president, to the AMA Annual and Interim Meetings.

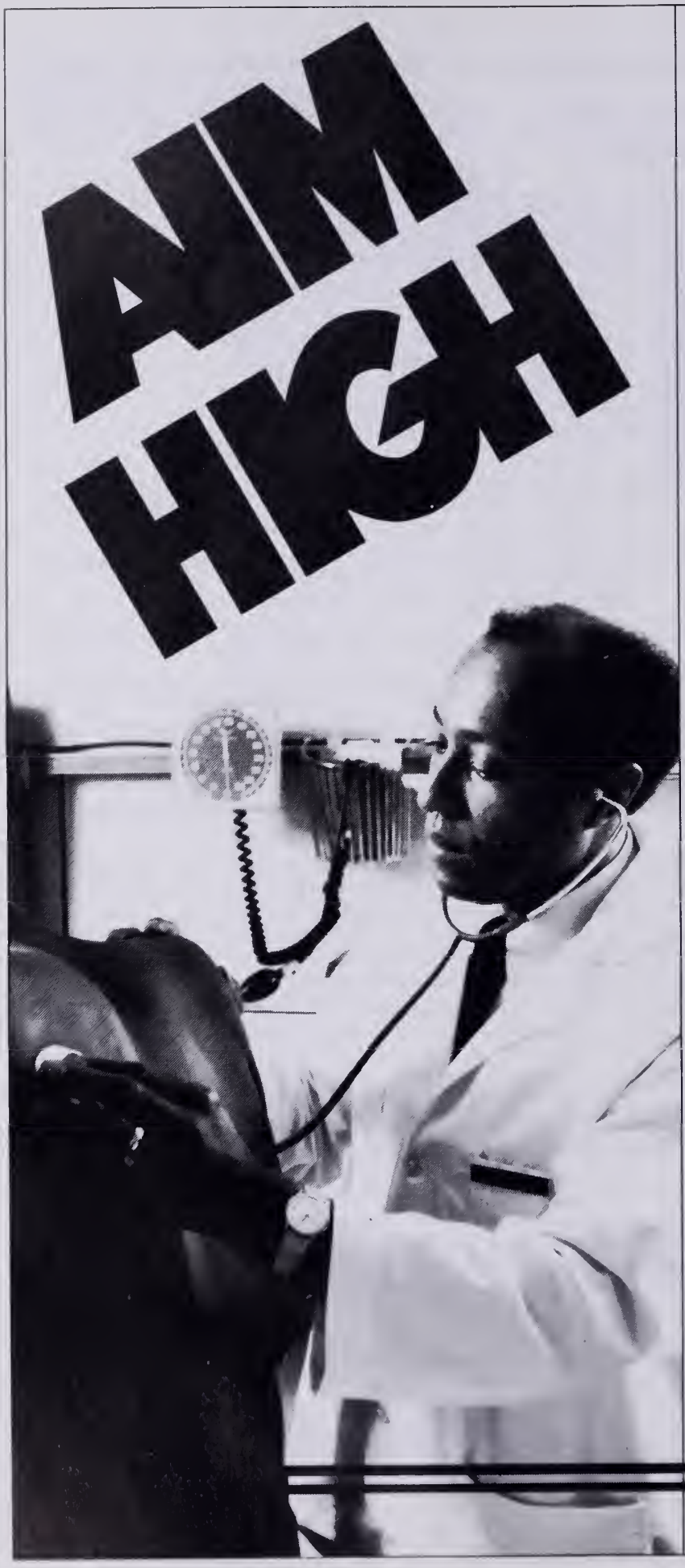
Our Delegation coalition efforts with medical associations from surrounding states (Kansas, Missouri, and Arkansas) have resulted in the formation of the Heart of America Caucus, which has only strengthened our position at the national level.

These 16 physicians by their required attendance at the AMA Annual and Interim Meetings, and quarterly OSMA Board of Trustees' Meetings have committed a minimum of three weeks time per year away from their practice to represent you. This labor of love on your behalf certainly merits your thanks and continued support.

In closing, in regards to the search committee efforts for a new Executive Director, the Witt/Kieffer, Ford, Hadelman & Lloyd firm in Dallas, Texas, has been retained to direct the search, which is well underway.

Thank you for the privilege.

David M. Kelly, M.D.



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Headache Fear

Hanna A. Saadah, MD

A prospective study of migraine patients seen at the office, over six months, was conducted to ascertain the prevalence and intensity of headache fear. With patients' help a questionnaire, with 14 questions and a maximum score of 50, was developed and refined.

A total of 100 patients with episodic migraines (<15 headache days/month) and another 100 patients with intractable migraines (≥15 headache days/month) were inducted. Fifty controls were selected from office patients who, on routine system review, were found to have migraine headaches but had never consulted a physician about them.

The average fear score of the control group was 3/50 (range: 0 to 9), and only 2% felt a strong compulsion to take analgesics when headaches began. Based on that, headache fear was defined as a score of 10 or more. The average fear score of the episodic group was 12/50 (range: 0-43), 49% had a fear score of ≥10, and 38% felt a strong compulsion to take analgesics. The average fear score of the intractable group was 19/50 (range: 0-46), 73% had a fear score of ≥10, and 60% felt a strong compulsion to take analgesics.

The average number of analgesic tablets taken per month in the control group was 7 (range: 0-150), in the episodic group 22 (range: 0-120), and in the intractable group 139 (range: 0-400). The three groups were comparable as far as age, gender, and migraine years. The frequency of migraines per month was 3 (range: 0-30) in the control group, 6 (range: 0-14) in the episodic group, and 29 (range: 15-30) in the intractable group.

As empirically defined, headache fear is common and increases in a statistically significant manner across the three migraine groups (control-episodic-intractable). I theorize that this fear may reinforce analgesic overuse and interfere with withdrawal efforts. Allaying this fear from the outset might provide patients with the support and reassurance needed for analgesic withdrawal, which is often necessary for recovery.

Conceptually, according to Bolles and Fanselow,[1] fear and pain may be thought of as distinct competitive motivational systems, that modify perception and behavior, with fear being the dominant system. What actually provokes the fear response is the expectancy of pain (anticipatory anxiety) and not the pain itself. Clinically, managing the fear state from the outset reduces both anxiety and suffering. However, when this fear is not allayed, the resultant motivational state (state of anticipatory anxiety and fear) dictates that defensive behavior will occur, while the environment determines the form which the defensive behavior will take. In a society where pills have become a primary defense against ills, it is not surprising that headache sufferers resort to this primary defense of pill-tak-

Direct correspondence to Hanna A. Saadah, MD, Mercy Health Center, 4205 McAuley Boulevard #400, Oklahoma City, Oklahoma 73120.

ing when their anticipatory anxiety forebodes pain. Because the reduction in fear is extremely reinforcing, this pill-taking behavior becomes repetitive and traps the individual in a detrimental state of compulsive analgesic overuse so often associated with intractable (chronic daily) headaches. In headache sufferers, according to Philips and Jahanshahi,[2] this pain conditioned pill-taking behavior worsens with chronicity, even when the pain intensity remains constant, and may ultimately lead to the phenomenon of exaggerated pain perception.[3] The following prospective, controlled, open study was undertaken as a pilot attempt in order to begin defining and quantitating this postulated state of headache fear.

Materials and Methods

With patients' help the following preliminary questionnaire, with 14 questions and a maximum score of 50, was developed and refined:

Please answer these 14 questions by circling the correct response:

A. I have had bad headaches so long that the idea of having another headache frightens me to the point that I feel compelled to take my anti-headache medications:
Yes. No.

B. I start to become afraid of my headaches:
0) (They do not really frighten me.)
1) only when the headaches become unbearably severe.
2) only when the headaches start to become bothersome.
3) at the earliest beginnings of the headaches, before they become bothersome.
4) at the mere thought of the headaches, even before they actually begin.

C. I react to my fear of headaches by taking my anti-headache pills:
0) (I do not take any pills.)
1) only when the headaches become unbearably severe.
2) only when the headaches start to become bothersome.
3) at the earliest beginnings of the headaches, before they become bothersome.
4) at the mere thought of the headaches, even before they actually begin.

D. My fear of headaches is so great that the notion of trying to stop using my anti-headache pills frightens me:
0) (not in the least bit.)
1) slightly, but I know that I can stop them if I try.
2) moderately, but I am still willing to try to stop them.
3) severely, so that I am not willing to try to stop them on my own; I will need some medical assistance if I am to try.
4) so much so, that I am not even willing to consider stopping them, regardless of medical assistance.

E. I have had my headache fear:
0) (I have never had any fear.)
1) less than one year.
2) one to two years.
3) two to four years.
4) five or more years.

F. My headache fear:
0) (I have never had any fear.)
1) is improving with time.
2) is staying about the same.
3) is getting worse with time.
4) is so bad that it can not possibly get any worse.

G. My headache fear:
0) (does not bother me at all, as compared to my headaches.)
1) bothers me less than my headaches do.
2) bothers me about the same as my headaches do.
3) bothers me more than my headaches do.
4) bothers me so much that my headaches seem insignificant.

H. As far as the sharing of my headache fear with others:
0) (It does not bother me to discuss my fear with others.)
1) I am willing to discuss my fear, but only with my close friends and relatives.
2) I hesitate to discuss my fear, even with my close friends and relatives.
3) I refuse to discuss my fear, even with my close friends and relatives.
4) I am so ashamed of my fear that I guard it as a deep personal secret.

I. If you have an important occasion, vacation, trip, etc., do you fear that the headaches could interfere with this event?
0) No, I do not fear, nor do I worry about it.
1) Yes, I fear a little bit, and I worry about it occasionally.
2) Yes, I fear quite a bit, and I worry about it

part of the time.
3) Yes, I fear a lot, and I worry about it most of the time.
4) Yes, I fear so much that I cause myself to have more headaches by worrying about it all of the time.

J. If you have an important occasion, vacation, trip, etc., when do you start to worry that the headaches might interfere with this event?
0) I do not worry at all.
1) I start to worry just before the event begins.
2) I start to worry a few days before the event begins.
3) I start to worry a few weeks before the event begins.
4) I start to worry a few months before the event begins.

K. If you have an important occasion, vacation, trip, etc., do you start to worry that you may not have enough anti-headache medications to last the entire event?
0) No, I do not worry at all.
1) Yes, I worry, but I can calm myself down if I can count my pills periodically.
2) Yes, I worry, but I can calm myself down if I can count my pills frequently.
3) Yes, I worry, and I can not calm myself down, even though I frequently count my pills and realize that I do have enough anti-headache medications to meet my needs.
4) Yes, I worry, and even though I realize that I have enough anti-headache pills to meet my needs, I still can not calm myself down, and so I try to obtain another refill, just in case I need more than the amount I already have.

L. My headache fear:
0) (does not interfere at all with my life, work, or happiness.)
1) interferes occasionally with my life, in a small way.
2) interferes frequently with my life, in a significant way.
3) interferes daily with my life, in a big way.
4) interferes so greatly with my life, that I consider my life to be totally ruined.

M. My headache fear:
0) (does not cause me to avoid any of my social or pleasurable activities.)
1) causes me to avoid very few of my social or pleasurable activities.
2) causes me to avoid some of my social or pleasurable activities.
3) causes me to avoid many of my social or pleasurable activities.
4) causes me to avoid most of my social or pleasurable activities.

N. My headache fear causes me to panic &/or blush, tremble, sweat, and feel my heart pound and palpitate:
0) (Rarely or never.)
1) Only if my headache medications are not within my reach, when I feel that I need them to abort an impending headache.
2) Even if my headache medicines are within my reach, and I would be able to use them to promptly abort an impending headache.

Over six months, consecutive office patients who fulfilled the International Headache Society criteria for migraine headaches,[4] were asked to complete the above questionnaire in my presence. All patients cooperated when I explained the reasons behind the questionnaire and discussed their individual concerns. My presence while patients filled out the questionnaire was necessary because no pilot research was done to validate these empirical questions and, consequently, I was occasionally asked to explain the meaning of a certain question.

Based on their migraine headache history, patients were divided into three groups: a) Control: comprised the first 50 patients who came to the office for internal medicine reasons (unrelated to headache) and who, on routine system review, were discovered to have migraine headaches for which they had never consulted a physician. It was more difficult to find controls than patients; this explains the fact that the number of controls could only be half of the patient groups. b) Episodic: comprised the first 100 patients with less than 15 migraine headache-days per month. c) Intractable: comprised the first 100 patients with 15 to 30 migraine headache-days per month. A headache-day was defined as a day which was partly or totally occupied by headache. Migraine years were defined as the number of years with migraines between the first recalled migraine and the present. Headache-severity was not quantitated because of its highly subjective nature.

Results

Total fear scores were obtained by adding the numbers circled by patients for the questions B to N; question A, compulsion to take pills, (where the answer was yes or no), was analyzed separately. Each question was answered at maximum and at minimum scores, at least once, indicating

Table 1. Clinical Data of the Three Migraine Groups

	Controls	Episodic	Introctoble
Number of potients	50	100	100
% Mole/Femole	18%M 82%F	16%M 84%F	11%M 89%F
Age in Yeors	48 (17-75)	43 (12-88)	44 (16-81)
Migroine Yeors	28 (1-60)	25 (1-54)	28 (0-74)
Heodoches/Month	3 (0-30)	6 (0-15)	29 (15-30)
Pills/Month	7 (0-150)	22 (0-120)	139 (0-400)
% Compelled to toke Pills	2%	38%	60%
Feor Score (Scole 0 - 50)	2.74 (0-9)	12.05 (0-43)	18.56 (0-46)
% Feor Score > 9/50	0%	49%	73%

Numbers inside brackets are (Ranges) and outside brackets are Means().

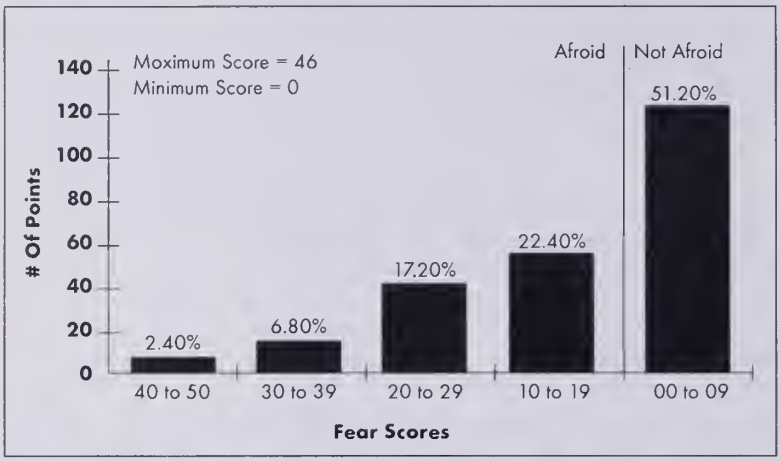


Figure 1. Fear Scores of All Three Migraine Groups

that the ranges of severity were appropriate for this patient sample.

Table 1 shows the clinical data of the three migraine groups and their fear scores. The groups were statistically comparable as far as age, gender, and migraine years. Using the one-way analysis of variance, the differences in total fear scores were statistically significant among all three groups at the alpha = .05 level. Because of that, and because the maximum score in the control group was 9/50, headache fear was defined as a score >9/50.

Figure 1 shows the frequency distribution of the fear scores of all three migraine groups pooled together. Of the 250 patients, 122 (49.80%) had a fear score of 10 or more and were considered afraid.

Figure 2 shows the mean group scores for the individual questions B-N, with no inter-group overlap except at question C.

Table 2 shows all variables that reached a statistically significant difference among the three groups.

Figure 3. Shows the frequency distribution of the fear scores for each group.

For the individual questions B to N, the overall reliability alpha was .9318 (excellent). This reliability would not increase and would only slightly decrease if any one question were to be deleted, indicating that the questions were measuring different parameters and not asking the same thing but in different ways.

Question A (compulsion to take pills), when the answer was no, predicted a fear score of less than 10 in 91.4 % of patients (specificity); when the answer was yes, it predicted a fear score of 10 or more in 72.1% of patients (sensitivity). This indicated that it was a good screening question with 82% correct group classification as far as headache fear or absence of fear was concerned.

Although there was a general tendency for the afraid patients to take more pills than the unafraid ones, the average numbers of pills and headaches/month did not reach statistically significant differences between the afraid and unafraid groups. This unexpected finding indicated that the average number of pills correlated best with headache frequency and was not a good indicator of fear.

Discussion

Based on these preliminary data and my clinical experience, I theorize that headache fear is prevalent and increases with the clinical impact of headaches from minor (control group) to moderate (episodic group) to severe (intractable group). The fear scores, however, did not correlate significantly with the number of pills or headaches per month, a finding shared by Hursey and Jacks.[5] Using the fear-of-pain questionnaire developed by McNeil, Rainwater, and Aljazireh, they found that fear of pain was generally not related to headache characteristics such as frequency, severity, or duration, but that it was related to the impact of headaches on the lives of headache victims. Hence, they considered their data consistent with models of chronic pain that do emphasize the fear of pain over the nociceptive intensity of the pain. From the opposite perspective, Stewart, Linet and Celentano found that "Subjects with panic disorder or panic syndrome reported more frequent occurrence of headaches during the preceding week, as well as headaches of longer duration and substantially more headaches with migraine symptoms than individuals without a history of panic attacks."[6]

Clinically, fear is an important variable to assess because, according to Bolles and Fanselow,[1] fear reduction is a very reinforcing defensive behavior. In the case of headache-fear, a reinforcing defensive behavior utilized in pain and fear reduction is the repetitive compulsive intake of

analgesics (see questionnaire). This analgesic overuse may give birth to rebound headaches and render them resistant to treatment.[7]

Question A (compulsion to take pills) may be used for screening because it had an 82% reliability, 72.1% specificity/91.4% sensitivity). Nevertheless, the questionnaire as a whole, which was relatively easy to understand and took an average of 5 minutes to answer, will have to be refined by experts in the measurement of behavior before it could be utilized meaningfully by other headache practices. Being preliminary it suffers from critical flaws in design, one of which is that the data were gathered by the investigator (who discussed the questionnaire with each patient and who was also the prescriber during the same office visit), which may foster biased responses.

I theorize that headache fear reinforces compulsive analgesic overuse and interferes with analgesic withdrawal. Furthermore, the resistance to analgesic withdrawal seems directly proportional to the intensity of fear. Assessing and allaying this fear from the outset provides patients with the support and reassurance needed for analgesic withdrawal, which is often necessary for recovery.

Table 2. Statistically Significant Data

	Control	Episadic	Intractable	Can/Eps	Can/Int	Eps/Int
Meon Pills/Month	7 26	22.43	138.66	NS	P<.05	P<.05
Mean Fear Scare	2.74	12.05	18 56	P<.05	P<.05	P<.05
% Who Feel Compelled To Take Pills	2%	38%	60%	P<.05	P<.05	P<.05
Meon Scores/Questions						
B	0.42	1.48	1 88	P<.05	P<.05	NS
C	1 4	2 2	2.23	P<.05	P<.05	NS
D	0.18	1.34	1.9	P<.05	P<.05	P<.05
E	0	1.53	2.41	P<.05	P<.05	P<.05
F	0 08	0.92	1.74	P<.05	P<.05	P<.05
G	0.22	0.61	0.72	P< 05	P<.05	NS
H	0 1	0 41	0.64	NS	P<.05	NS
I	0.04	0.86	1.56	P<.05	P<.05	P<.05
J	0.1	0.7	1.36	P<.05	P<.05	P<.05
K	0.04	0.45	1.13	NS	P<.05	P<.05
L	0.06	0.74	1.38	P<.05	P<.05	P<.05
M	0.06	0.56	1.3	P<.05	P<.05	P<.05
N	0.04	0.22	0.34	NS	P<.05	NS

NS= Not Significant CON = Control EPS = Episadic INT = Intractable
1 Analysis of Variance Multiple Range Tests Tukey-HSD test (significonce level P = or < a5)

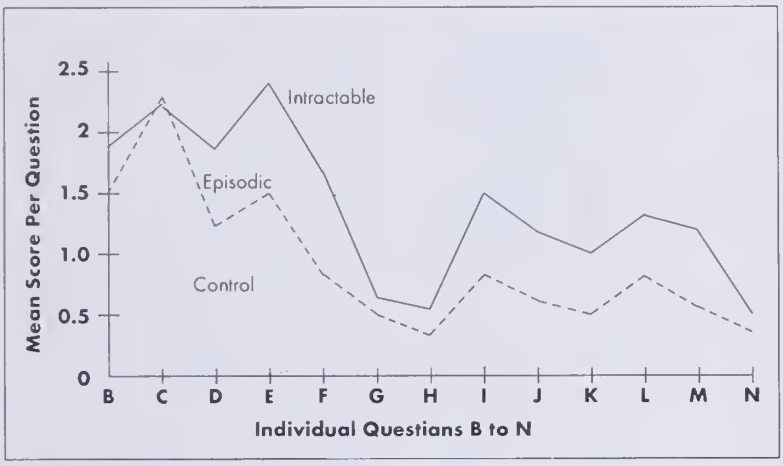


Figure 2. Mean Fear Scores af the Three Migraine Graups In Relation Ta Each Question

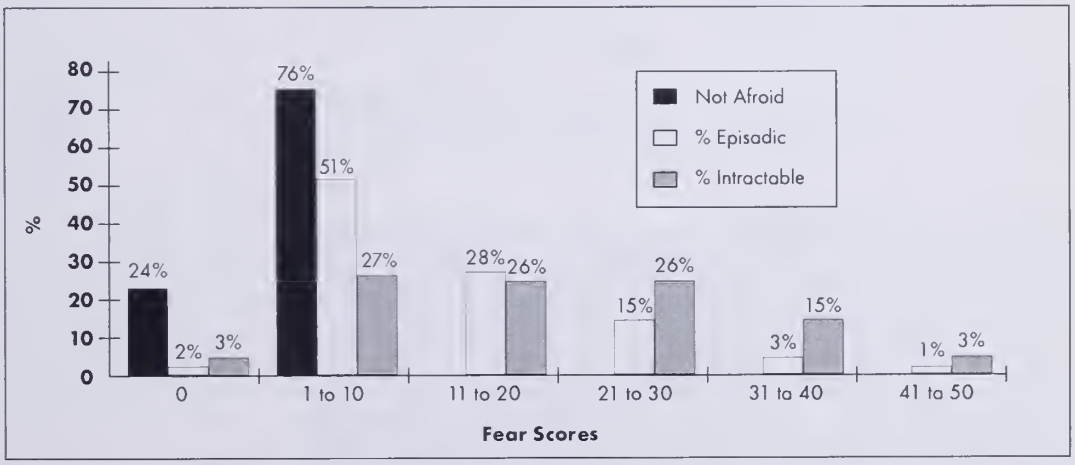


Figure 3. Frequency Distributian of Fear Scares for Each Graup

Acknowledgments

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Herniated Intervertebral Disc Without Pain

Worren F. Gorman, MD; John A. Hodak, MD

The diagnosis of herniated intervertebral disc is often made in cases of radicular pain in the low back, the neck, or sciatica or brachialgia. Practitioners often call upon radiologic imaging to confirm this diagnosis. But on radiologic examination, such a herniation may consist of a bulge, protrusion, prolapse, extension, extrusion or sequestration of this disc. We define and illustrate these terms from the literature.

We then review the radiologic studies of normal controls, who have never had sciatica, brachialgia or pain in the low back or the neck. In over one-quarter of these controls, studies using the plain x-ray, CT scan, myelogram, and MRI show various radiologic signs of a herniated intervertebral disc. We therefore recommend that practitioners should not exclusively rely on radiologic imaging to confirm the clinical diagnosis of a herniated intervertebral disc.

In making the clinical diagnosis of a herniated intervertebral disc, pain is a prominent symptom.[1-4] This pain is radicular,[5] due to compression of a radicle—a nerve root—by the displaced disc, and therefore radiates into the distribution of the nerve root (Table 1). In addition to this localizing pain, there often is diminished pin prick perception in the same radicular distribution. Motor signs include localizing muscle weakness, such as weakness of the extensor muscle of the great toe—extensor hallucis longus—in Lumbar 5 radiculopathy, or reflex loss, such as the loss of one ankle jerk in Sacral 1 radiculopathy, or even atrophy of the affected muscles. To confirm this clinical diagnosis, practitioners frequently call upon radiologic imaging by CT scan or MRI.

But before we accept this confirmation, let us ask a basic question. How often does a person have the radiologic signs of a herniated intervertebral disc without ever having had sciatica,[6] or pain in the low back, leg, thorax, neck, shoulder or arm? In our answer, we first define the terms *herniation* and *herniated intervertebral disc*, then present a brief comment on the aging spine and close with a review of herniated intervertebral disc appearing in normal controls.

Definitions

A hernia—the Greek word for *rupture*—is a bursting, violent tearing of tissue,[7,8] which produces

Table 1. Examples of Radiculopathy in Discogenic Disease

Root Affected	L-5	S1
Disc Spoce	L4-L5	L5-S1
Muscles Affected	[1]Extensor Hollucis Longus Peroneols, Anterior Tibiol	Gostrocnemius, Toe Flexors Gluteus Moximus
Reflex Loss		[2]Ankle Jerk
Sensory Loss	Foot, Dorsum, Mediol	Foot, Dorsum, Loterol

1 Have the patient extend both great toes simultaneously
2 Compare the affected side with the non-affected side
Source: Schlesinger ED, Citation 2

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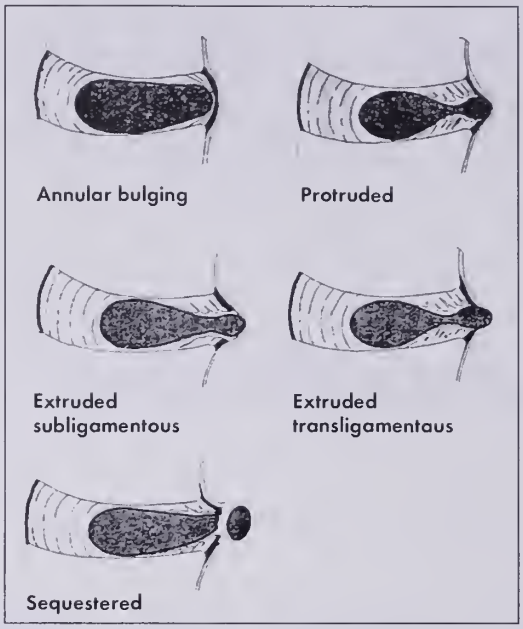


Figure 1. Schematic af MRI staging af herniated intervertebral disc [bulge, pratrusion, extrusion, sequestration]. (Kim KY. Orthopaedics 1992; 14: 493-497)

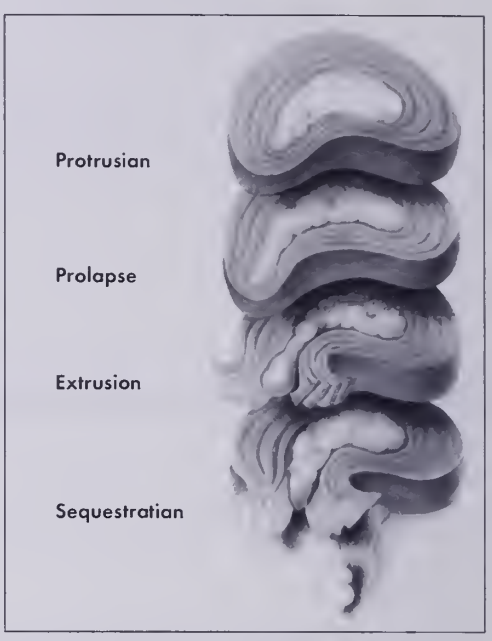


Figure 2 (far right). Displacement of disk tissue. (Bullough 1988)



Figure 3 (below). Intervertebral discs.

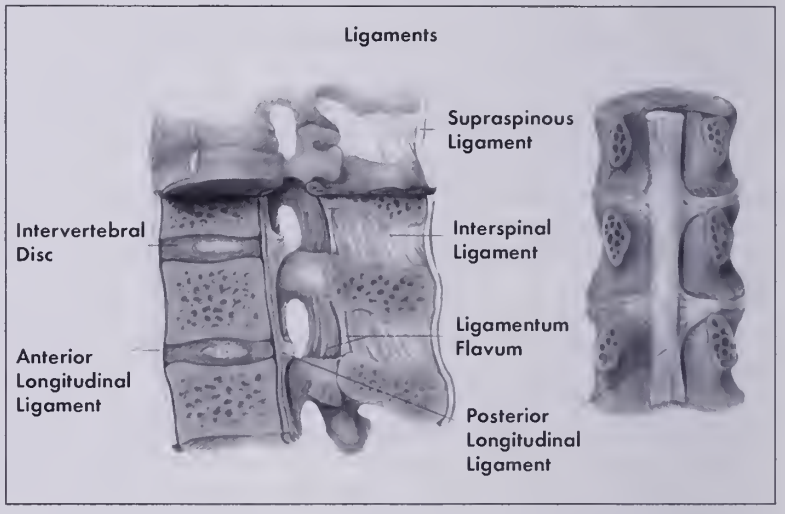


Figure 4 (belaw right). Vertebral ligaments.

pain and disability.[9] Both the lay public and legal profession[10] know this.

But medical descriptions of a herniated intervertebral disc vary widely, ranging from the injury causing a sequestration (Figs 1,2) of a disc due to a fall from 75 feet,[11] to noting that the signs and symptoms of this condition are similar to those of back strain and arthritis,[11] to commenting that "herniated disc" serves as a convenient label for cases of low back pain.[12]

See Figures 3 and 4 for pertinent clinical anatomy.

Deyo and associated back pain clinicians[7] defined disc herniation as the protrusion of the nucleus pulposus through a weakened anulus fibrosis. Boden and associated orthopaedists[13] differentiated a herniated nucleus pulposus from a bulge: Bulge is a diffuse, usually non-focal protrusion of non-osseus material beyond the normal disc space, while a herniated nucleus pulposus is an extension, usually focal, of disc material beyond the osseus confines of the vertebral body, resulting in displacement of extradural fat, nerve root or theeal sac. Wood with his orthopaedic-neuroradiologic team,[14] defined a herniation as a focal protrusion or extrusion of nuclear material typically extending to the spinal cord. A bulge, they wrote, is a diffuse extension of disc-like material beyond the confines of the normal vertebral margins.

Jensen with her collaborating neuroradiologists[15] observed that *herniation* is not a well de-

fined morphologic term, and refused to use it. Instead they described *bulge, protrusion,* and *extrusion: Bulge* is a symmetrical extension of the disc beyond the end plate of the vertebra; *protrusion* is an asymmetric horizontal extension of the disc beyond the interspace between the vertebrae; *extrusion* is a more extensive displacement, with the disc both extending beyond the intervertebral interspace and also being distorted in shape. Kim[38] and other neuroradiologists describe the stages of herniation of an intervertebral disc: these stages (Fig. 1) progress from anular bulging, to protruded, to extruded subligamentous, then to extruded transligamentous, to sequestered. ("Extrusion" is an extrusion through the anulus fibrosis; the "ligament" is the posterior longitudinal ligament). Another approach to anatomical staging of disc herniation is this: Spinal pathologists Bullough and Boachie-Adjei[17] rejected the term *herniation,* instead using *displacement.* They stage displacement, in a spectrum of worsening severity, as protrusion, prolapse, extension, and sequestration (Fig. 2). In a text, Ramsey and another neuroradiologist[16] tautologically stage herniated disc as bulging, herniated, extruded, or sequestered, noting that bulging disc generally is not associated with radicular pain.

We recommend that disc displacement be described in strictly morphologic terms, such as "displacement of the L5-S1 disc to the right and posterolaterally, impinging on the S1 nerve root."

Aging and Degenerative Disc Disease

Degenerative disc disease is a continuum that "normally begins in the teens, and continues throughout life."[18] Disc changes take place with normal aging, so that from the middle decades of life on, "a normal disc is the exception, rather than the rule."[19-20] Thus, "disc degeneration is a natural part of the human condition."[5]

In the legend to Figures 5 through 9 we outline these normal changes in the disc at ages 7, 25, 30, 50, and 72.

In the context of aging, let us view one feature of cervical spine disease that is easily demonstrated in the practitioner's office x-ray—spinal stenosis. Spinal stenosis is defined as narrowing of the anteroposterior diameter of the spinal canal at C5 to 13 millimeters or less[21] (Table 2). But radiologic spinal narrowing also appears in asymptomatic individuals whom we are about to discuss. In some persons at age 30,[22] in 75% by age 60,[23-24] and by age 70, in almost all persons.[25] Thus from middle age on, we develop radiologic signs of discogenic spine disease.

In the literature, we see the following terms used essentially as synonyms: spinal osteoarthritis, spondylosis, spondylopathy, and discogenic or degenerative disc disease.

Figure 5. Axial View. Lumbar intervertebral disk of 7-year-old. The glistening nucleus pulposus makes up the center of the disk and is composed of highly hydrated proteoglycan and collagen. Note the surrounding and constraining circumferential lamellae of collagen fibers comprising the anulus fibrosus.

Figure 6. Axial View. Lumbar intervertebral disk of 30-year-old. Loss of glistening appearance of the nucleus pulposus with age due to internal chemical changes. There is clear evidence of early fissuring of the nucleus pulpasus. Again note the surrounding and constraining circumferential lamellae of collagen fibers.

Figure 7. Sagital View. Lumbar intervertebra disk of 25-year-old. The center disk has became thinner due to early desiccation. The nucleus pulpasus is still clearly discernable. The lower disk is largely preserved.

Figure 8. Sagital View. Lumber intervebral disk of 50-year-old. Fissuring and blurring of the margins of the nucleus pulpasus renders it less discernable from the surrounding anulus. Striking loss of height due to dessicatian fissuring, and fracturing of the nucleus pulpasus is seen at L4–L5. Note anterior and posterior bulging of the disks at all levels.

Figure 9. Sagital View. Lumbar intervertebral disk of 72-year-old. Marked thinning of the disk spaces due to extreme dessicatian, fissuring, and fracturing of the nucleus pulpasus which is no longer discernible. The new unbuffered anterior and posterior margins of the vertebral bodies adjacent to the degenerative disk show buildup of reactive bony spurs. The posterior spurs encroach upon and narrow the spinal canal.

(Permission to reprint these figures was unavailable.)

Table 2. Cervical Spinal Stenosis

- Cervical stenosis can appear radiologicallt at age 30. By age 60, 12% of asymptomatic individuals show indentation of the spinal cord.
- Radiologic cervical spondylosis appears in 16% of asymptomatic persons under 64, and 26% of asymptomatic persons over 64.
- Cervical spinal stenosis appears frequently in elderly.
- Cervical spinal radiology abnormality in 75% from age 60 to 70 on.
- Radiologic cervical stenosis in 85% past age 60, "almost all" past 70.
- Radiologic cervical changes past age 60; males 95%, females 70%.
- Radiologic cervical stenosis in 75% past age 60.

Cervical spinal stenosis = on lateral plain x-ray, A-P diameter of spinal canal at C5 is 13mm or less

Herniated Disc in Asymptomatic Controls

Pain, the nature of which we described above, is accepted as a prominent symptom in the diagnosis of a herniated intervertebral disc. Now let us challenge this acceptance: do the radiologic signs of a herniated intervertebral disc appear in persons who have never had this pain? The answer,

Table 3. Radiologic Diagnosis in Asymptomatic Persons

Degenerative Disc	23%
Facet Joint Abnormality	22%
Spondylolysis	7%

Source: Bronch WT: *Office Practice of Medicine*, 1994, p. 651

Table 4. Lumbar Spine MRI of Normal Controls

MRI Findings	Age 20-39	Age 40-59	Age 60-80
Herniated Nucleus Pulposus	21%	22%	36%
Bulging Disc	56%	50%	79%
Degenerated Disc	34%	59%	93%

Source: Boden SD: *J Bone Joint Surg* 1990, 72-A;403-408.

Table 5. Lumbar Spine - MRI Findings in 100 Asymptomatic Persons

MRI Findings	% of Asymptomatic Persons
Bulge	52%
Protusion	27%
Extrusion	1%

The authors note that the term "herniation" is used to describe a wide spectrum of abnormalities
Source: Jensen MC: *N Engl J Med* 1994; 331:69-73.

we show below, is yes, in over one-quarter of volunteers for such research studies, whom we call asymptomatic controls, because they have never had spinal pain, sciatica, low back, leg, thorax, neck, shoulder, or arm pain.

A. Lumbar Spine

1. Lumbar Plain X-ray.—On plain x-ray studies, Branch reported that about one-fifth of the normal controls showed significant abnormalities, as follows[26]:

2. Lumbar CAT Scan.—CAT scans of similarly normal controls, were studied by Wiesel[27] with experimentally blinded neuroradiologists. These 53 normal controls showed a herniated nucleus pulposus with significant frequency: under age 40, herniated nucleus pulposus appeared in 20%, and over age 40, herniated nucleus pulposus appeared in 27%.

3. Lumbar Myelogram.—Myelograms, using the then available oil-soluble contrast medium, have been done on normal controls. In one study by Hitselberger and Witten,[28] patients with an auditory nerve tumor, and who had never had back pain, were given myelograms. Of these controls, 35% showed the myelographic signs of a herniated disc.

In another myelographic study by Falconer and associates, patients served as their own controls. A number of patients who had low back pain were given myelograms, which showed a herniated intervertebral disc. After their back pain had disappeared, they were given a second myelogram. Despite their now having relief from their pain, their myelographic deformity of a herniated disc persisted.[29]

4. Lumbar MRI.—Magnetic resonance imaging also shows lumbar disc herniation in asymptomatic controls. In an early study by Boden and colleagues, a herniated nucleus pulposus was seen at least in one vertebral level in 22% of asymptomatic persons age 20 through 59, and in 36% of those age 60 through 80. Table 4 also shows that in these 67 normal controls, a bulging disc or a degenerated disc was found in more than half of the subjects.[13]

In a more recent and larger study by Jensen and associates using the MRI with 100 asymptomatic persons, 52% showed a bulge and only the minority had normal intervertebral discs.[15] A disc protrusion or a "herniation" was found by Brandt-Zawadzki and colleagues in 23% to 27% of 98 control subjects, in a confirmatory study.[30]

B. Thoracic Spine

Asymptomatic thoracic disc herniation is intermediate in frequency of appearance between asymptomatic lumbar disc herniation and asymptomatic cervical disc herniation, according to Awwad, et al.[31]

In 90 asymptomatic persons, MRI of the thoracic spine by Wood and collaborators[14] showed disc herniation in 37%, bulging in 53%, and anular tear in 58%.

C. Cervical Spine

Disease or injury of the cervical spine, including acceleration or "whiplash" injury, received medical care about one-third as often as do lower back complaints. In occupational medicine, according to Wiesel,[32] neck cases are about 20% as frequent as low back cases, but account for a substantially greater amount of lost time and light duty time. Individuals who have had no symptoms or signs of cervical spine injury or spine disease, such as localized pain with motor or sensory loss, also demonstrate abnormalities on radiographic studies.

These cervical anatomic abnormalities in asymptomatic persons are age related. They begin at about age 30 and progressively worsen according to Schutta,[19] so that "normal aging merges into pathology, without exception," and by age 40 Bland[33] notes, the cervical nucleus pulposus has degenerated.

1. Cervical Plain X-ray.—With plain x-ray, 200 subjects from age 20 to 65, who had no his-

tory of rheumatic disorder or disease or injury of the cervical spine, were examined for degenerative disc changes. A single lateral cervical roentgenogram, measured to compensate for tube-film distances showed the following, demonstrated by Gore.[34] Beginning at age 30, and gradually increasing in severity with age, there was:

a. Narrowing of the intervertebral disc space.

b. End plate sclerosis—a hardening of the portion of the vertebra which is adjacent to the disc.

c. Osteophyte formation—osteophytes being bony growths which protrude from a vertebra toward, or onto, a spinal nerve or the contents of the spinal canal.

2. Cervical MRI. —Two major MRI studies show that after age 30, cervical intervertebral disc protrusion, and even spinal cord compression, appear in many asymptomatic individuals. In one study, 89 subjects age 9 to 63 years, who had no history of neck pain or disorder, received MRI examinations. Lehto and colleague[22] showed that a disc prolapse, or a disc protrusion, was found in 36% of them. Other findings which are associated with a herniated disc, such as disc narrowing or disc degeneration, were seen with greater frequency. The authors concluded that after the age of 30, on the MRI of the cervical spine, "degenerative changes are common."

In another study of 100 asymptomatic subjects' cervical spines, protrusion also was searched for by Tercsi and coworkers.[35] There was disc protrusion in 20% of those age 45–52. In the subjects 52–79 years old, disc protrusion, which was defined as consisting of herniation or bulge was seen in 44%. As expected, the older persons showed more of this abnormality, since it appeared in 57% of those older than 64.

In addition, spinal cord symptoms were specifically inquired for and the examiners noted on MRI any displacement of an intervertebral disc making contact with the spinal cord. The spinal cord symptoms consisted of local cervical pain, shock-like or burning sensations, decreased sensation, weakness, fasciculations or sphincter disturbance; and if specific movement of the neck produced any of these symptoms. Contact between a disc and the spinal cord consisted of either impingement, or compression by the disc on the spinal cord.[24,35-37]

Spinal cord impingement, caused by a protruding disc, was seen in more than 16% according to Hayashi, et al.[24] Spinal cord compression was seen in more than 7%, also in those persons who had no history of cervical spinal cord disease or injury.[24]

Conclusion

First, definitions of the radiologic signs of a herniated intervertebral disc are variant and contradictory. We recommend reporting "displacement" of this disc, using strict morphologic terms, such as "displacement of the L5-S1 intervertebral disc posterolaterally to the right, impinging on the S1 root sleeve." Second, since the radiologic signs of a herniated intervertebral disc appear in a large number of individuals who have never had spinal pain, the radiologic signs of a herniated intervertebral disc should not serve as confirmation of a clinical diagnosis of this condition. J

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Appendix: Cervical Spondylopathy

Defined
Non-specific degenerative osteoarthropathy, in which normal aging merges into pathology.

Symptoms
Aches in neck, upper back, and between scapulae
Pain may radiate into fingers

Examination
1. Range of motion, both voluntary and passive are reduced
2. Plain x-ray, lateral view
 Stenosis, particularly at C5
3. MRI
 a. Intervertebral disc space height is under 5mm
 b. Osteophyte formation
 c. Ligamentum flavum hypertrophy or ossification
 d. Facet abnormalities

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It Takes a Revolution

Restoring the Balance in Health Care

Address by Percy Wootton, MD, President-Elect, American Medical Association
to the OSMA House of Delegates, Friday, April 25, 1997

Good morning and thanks for the warm welcome. I want to thank Drs. Harper and Selby for their kind invitation. I also want to thank each and every one of you—the members of OSMA—for all that you're doing on behalf of organized medicine. Through your participation in OSMA, you are giving the patients and physicians of this state a needed advocate—and our AMA a needed ally in the ongoing battle to improve the health care system.

As one of only four unified states in the Federation—you are meeting medicine's challenges together, an approach that is sorely needed during these days when so much is being done to divide our profession. On behalf of our AMA Board of Directors—I thank you for your support and we encourage you to keep up the good work.

On a personal note, I want to extend a special hello to my long-time friend and colleague, Ed Calhoon. Ed and I shared many interesting conversations during the years he headed up your delegation in the AMA House and I served on the Council of Legislation. One of the things I remember best about Ed is that whenever there was legislation proposed that he did not think adequately addressed a problem or that he did not think would elicit support from physicians, he would tell me, "Percy, that dog just won't hunt." It was Ed's simple way of telling me to take a harder look at the proposal or, if I supported it, to reconsider my position.

These days as I prepare to begin my service as AMA president, I find myself taking a harder look at most of the issues affecting patients, physicians, and medical practice. This morning, I want to share with you some of what I see. Hopefully in a way that is as clear—if not quite as colorful—as Ed Calhoun's.

The truth is I don't have to look too far to see some of the concerns facing physicians today, because I see many of them every day in my own practice in Richmond. For the past 34 years, I've been part of a group practice that was founded in 1932 by a disciple of Paul Dudley White, whom you old-timers will remember as President Eisenhower's personal physician.

We are 17 men and women physicians with educational backgrounds as varied as our practice experiences. In many ways, we are a mirror of everything that is good, and not so good, in medicine today.

We've had two doctors who decided to throw in the towel while they were still in their 50s because they found some of the changes in the practice of medicine not to their liking. At the same time, my two newest partners, fresh from their fellowships, have trained in this new environment. That's all they know, and let me tell you, they are just as full of excitement for medicine as you and I were when we were brand new. They see, as many of us still do, all the opportunities out there for giving our patients the same high quality of care that's always been the hallmark of American medicine.

So, yes, I share the enthusiasms of my youngest colleagues, but also understand, and I

share, many of the concerns of our more veteran physicians. Those same concerns are what drive the AMA today: Declining membership. Managed care constraints. Anti-trust relief. Government red tape. Health system reform. Medicare transformation. The configuration of the house of medicine itself. And most of all, for physicians like us, a return to place as respected leaders of our community

A "return to place" seems especially appropriate during this, the AMA's 150th Anniversary year. Because this historic anniversary provides a perfect opportunity to reflect on our profession, to see where we've been and where we're headed. And to recommit ourselves to the long-standing principles on which this profession was founded.

That's exactly what the AMA did last month, when we convened a historic conference on medical ethics in Philadelphia, birthplace of our AMA. We gathered several hundred physicians, bioethicists, and medical historians from all over the country to examine the impact of the AMA Code of Ethics on medical practice all over the world. And what we discovered is that what motivated our professional forefathers way back in the spring of 1847 is very much like what motivates us today: the needs of our patients. The quality of care. The ethical standards for physicians. And the covenant of trust that binds us all together in the patient-physician relationship.

Make no mistake. A corporate pendulum has swung across the face of American medicine, rewriting the rules and upsetting the delicate balance that so long has kept the peace between the business of medicine and the ethics of medical practice.

These guiding principles make up the very core of our professional world, a core which for centuries has remained unchanged. What has changed, however, is the world that surrounds our core. Today, it's not merely medicine between patient and physician anymore. Long gone are the days of the solo practitioner and physician autonomy, when cost and quality were guiding principles, not causes of controversy; and when a physician's ethical path was clearly lit and easy to follow.

Instead, doctor and patient today are forced to navigate through a marketplace where the patient/buyer must beware, where anonymous bureaucrats make medical and clinical decisions in the place of once-autonomous physicians; and where quality of care too often is sacrificed for the sake of cost and the bottom line. The landscape is treacherous, because the boundaries between the economics and ethics of care are breaking down in ways we've never experienced before.

Cost-cutting "48-hour deliveries" and "drive-through mastectomies" are so notorious that state legislatures and Congress and even the President are acting against them. News about health plans stopping physicians from telling patients everything they need to know about their health care are commonplace. Financial incentives to limit care are commonplace, too. Doctors who prescribe care that is considered too costly are "deselected." A practice that is ripping physician from patient often without the consent of either.

Make no mistake. A corporate pendulum has swung across the face of American medicine, rewriting the rules and upsetting the delicate balance that so long has kept the peace between the business of medicine and the ethics of medical practice. Restoring that balance for patients and their physicians is a primary mission of the AMA today—in fact, we're betting our future on it.

By "restoring the balance" we do not mean turning back the clock. We recognize that managed care is here to stay. In fact, about 80 percent of all AMA member physicians and many of our patients are involved with some form of managed care. And we have no argument that we need to better manage our patients' care with cost-effectiveness, efficiency, competition, coordination, and accountability.

Our point is that we believe all this can be accomplished without altering our ethical duty to our patients. Anyone who is a patient—and it's my guess that even includes the CEOs of the biggest HMOs—still expects their doctor to advocate for what is in their best interest as a patient.

Giving more weight to the individual patient is exactly what restoring the balance is all about. The big question is: Who is best qualified to make the basic decisions between cost and quality?

Our answer is that it is you—you are the

one who should be making those basic clinical decisions. Not the insurance companies. Not the government. Not the budget bureaucrats. We're the ones, we physicians, by the very nature of our calling who are most capable of deciding.

The challenge is to make sure that you and your colleagues really are the best qualified. It demands that someone set the standards, evaluate the physicians, draw the ethical lines, and strengthen the profession from the inside out. We believe that "someone" is the AMA. Let me tell you why:

If, indeed, there is a revolution in our health care system—and I believe there is—then we in the medical profession have to experience our own version of a revolution if we are to restore that balance I talked about and reestablish the patient-centered ethic in the world we work in.

This revolution will not happen on its own. It needs our help… your help. The AMA has been at the center of every major development in American medicine for 150 years. And our experience tells us that for any revolution in medicine to truly succeed, it must come from within the profession itself. Medical standards change more quickly than the government can act. State or federal regulation is too slow, too heavy-handed, and too political. The ultimate responsibility and authority must rest with the medical profession. As far we're concerned, that means it is up to organized medicine to stage this "revolution from within."

And this is the heart of my message today: We have a set of strategies and actions that quite literally are unprecedented in the modern history of organized medicine. I want to tell you what they are and what they mean to you.

Our first strategy is to increase physician accountability. To do it, we are putting in place a new, bold national program to assess physician performance with a single, universal standard of excellence.

The program is called "AMAP." It stands for the American Medical Federation Plan. And here's why we need it:

Right now, physicians average 10.5 visits a year from different accreditors. In my office in Richmond, we endured some 20 visits from these accreditors last year. Accreditors who are not our peers, but rather sent by insurers and managed care companies to evaluate how we practice. Individuals more interested in lowering costs than improving care. AMAP, however, is different. It will simplify the process because it will only conduct visits once every two years, and it will allow for a single AMA "seal of excellence."

In addition, AMAP will be conducted by our peers. Fellow health care professionals who understand the many nuances of medical practice. Individuals who understand that medical care cannot be evaluated on costs alone.

We're excited about AMAP. And we anticipate that the entire health care industry will eventually rely on AMAP and the AMA for a national standard of quality for physicians everywhere.

Our second strategy is to safeguard the professional standards that are at the core of that covenant between patient and physician that I mentioned a few minutes ago. To preserve and protect that covenant—this is the job of the brand new AMA Ethics Institute that we officially launched as part of our 150th anniversary celebration.

The institute will concentrate on four critical areas: end-of-life care, genetics, managed care, and professionalism. And the institute will work closely with the AMA Council on Ethical and Judicial Affairs to identify guidelines for ethical conduct in a variety of professional areas, including those raised by health delivery systems that place profits over patient care.

Our third strategy is to protect our individual patients from a new generation of threats that range from medical error to unscrupulous health plan profiteers. When a patient is harmed, it is not enough for the system to simply say, "We're sorry." In this age of advanced technology, we need to do more to prevent medical errors from happening in the first place. So we've established the National Patient Safety Foundation at the AMA to make sure that all patients in all settings receive their health care services safely. Our emphasis is on physician accountability and changing practices and procedures that contribute to doctor and hospital errors.

We also created the AMA Litigation Center to go to court in any jurisdiction in the country to fight for patient and physician rights when they are seriously jeopardized. And we have a legislative agenda that leads with patient protection—including our successful campaign against health plan "gag" clauses and the AMA's plan to save Medicare.

To sum up:

- Physician accountability with an AMA "seal of excellence."
- Protecting with professional standards and ethics the covenant between patient and physician.
- Protecting our individual patients from a sometimes dangerous health system environment.

Obviously, our agenda is ambitious. It has to be if it is to launch a revolution. And we cannot possibly do it alone. This revolution needs all the help it can get, and we need it from every quarter of this great alliance we in medicine call "the Federation"—every state, every county, every specialty society working in concert together.

Obviously, our agenda is ambitious. It has to be if it is to launch a revolution. And we cannot possibly do it alone. This revolution needs all the help it can get, and we need it from every quarter of this great alliance we in medicine call "the Federation"...

Yes, we are all equal partners in this revolution. And we understand that our credibility will be earned only on the basis of achievement. But "achievement" is part of what being a physician is all about.

One of my earliest memories of organized medicine was in my fourth year at the Medical College of Virginia. As part of our graduation, we were invited to dinner one evening to hear Doctor James Hagood, a prominent physician and state senator, who talked to us on the topic "Why Join Organized Medicine." And he made it clear that it was more of a command than a question.

He told us that when we entered medicine, we entered into privileged lives. And he reminded us of our obligation to give something back to our profession and to our community in exchange for that privileged life.

I took his words to heart way back and got involved with organized medicine and other community work. And looking around this room this morning, I can see that there were plenty of Dr. Hagoods out there. Wise mentors of our profession who impressed upon us the importance of giving back to the profession... of going above and beyond.

Today I would encourage each of us to spread that same message.

Go back to your practices and impress upon our younger colleagues the importance of their involvement.

Go back to your medical schools and teaching institutions and put forth Dr. Hagood's challenge to today's students and residents.

Because while the world around us has changed quite a bit since that first AMA meeting, our very core has not. A core committed to the ethics of medicine and meeting the needs of our patients.

At the AMA, we believe the best way to meet that commitment is to restore the ethical balance in medicine and do all we can to help the physicians of America fulfill our historic duty to our patients.

That's exactly what we've been doing for 150 years, and we plan to keep on doing it a lot longer, and we want you with us as we do it.

This is the most challenging, the most exciting, the most rewarding profession there is. Help us keep it that way.

Thank you.

Report of the Ad Hoc Committee on the Oklahoma Health Care Authority and SoonerCare

Over the post yeor the OSMA Board of Trustees heord testimony from physicians regording their experiences with the Medicoid Monoged Care Program (SoonerCare). The magnitude ond complexity of the problems outlined led to the establishment of an Ad Hoc Committee on Manoged Medicoid, which wos to collect doto for presentotion to the Board of Trustees and the OSMA House of Delegates.

Background

During Governor David Walters' administration, "The Oklahoma Family Choice Health Plan" was formulated. Initially it was to change the Medicaid program in Oklahoma from the current discounted fee-for-service format to a managed care format. Ultimately its goal was to affect health care services "to all Oklahomans." During 1993, HB 1573 and SB 76 were passed, followed by the passage of SB 650 in 1994 forming the Oklahoma Health Care Authority, a "politically insulated, technically competent mechanism... which will act to both coordinate and control the provision of health care services first to those whose coverage is funded by the state and eventually to all Oklahomans, regardless of the source of funding."

The Health Care Authority applied for and received authorization from the federal government to participate in the HCFA Demonstration Project. A waiver was prepared by state officials, which outlined specific guidelines for participation. The waiver was essentially the "business plan" which explained how the transition from traditional fee-for-service to the managed care format was to be accomplished in Oklahoma while still complying with federal requirements for Medicaid.

The justification for this program given by its proponents in state government, included the need to improve access to care; expand the kinds of services available by providing a comprehensive benefits package; address the problem of cost shifting and overutilization of emergency room services; and save state money.

The initial (urban) phase of the Medicaid Managed Care Program (SoonerCare) began in July of 1995 in Oklahoma City, Tulsa, and Lawton. Commercial health maintenance organizations (HMOs) contracted with the Oklahoma Health Care Authority to provide the health services required under the guidelines of the federally approved waiver. Only approximately 65,000 to 77,000 of the eligible AFDC Medicaid recipients received coverage for some portion of the first year under SoonerCare.

During that period, numerous problems were experienced. Conflicts were produced by long-standing Medicaid providers being cut off from access to their patients because they were not part of the four HMOs. Also, in order to assure that the OU Health Sciences Center retained the volume of Medicaid patients needed for fiscal and teaching purposes, a large number of AFDC recipients, who had traditionally received care at the OU Health Sciences Center, were auto-assigned to that medical center. This was not the case at other medical centers.

Auto-assignment is a process whereby Medicaid recipients who have not voluntarily chosen a physician by a certain time are computer-assigned to a primary care provider (PCP) who will be responsible for their care. In theory the primary care provider then receives a monthly capitation payment for each recipient on his or her panel. Only about 30% of the urban Medicaid recipients took advantage of the opportunity to choose their own primary care provider in the first twelve months.

The rural phase of SoonerCare began in October of 1996. Its format is based on individual physicians and physician groups contracting with SoonerCare to provide the required primary care services and receive capitation for those services. In a few areas in rural Oklahoma, not enough physicians have signed the SoonerCare contract to serve the Medicaid recipients in the area. Consequently, the patients in their area are "auto-assigned" to physicians in other towns. According to the waiver under which Oklahoma is functioning, patients in rural Oklahoma may be auto-assigned to physicians and hospitals up to forty miles away from their homes. One physician in Elk City was auto-assigned patients who live in Durant and in Okmulgee (more than 160 miles away).

Documented Problems—We heard testimony and received documentation from many physicians regarding the problems associated with SoonerCare. The stated objectives of SoonerCare are:

- To improve access to preventive ser-

vices, primary care, and early prenatal care of the Oklahoma's Title XIX population.

- To allow the recipient to choose a primary care physician.
- To integrate Medicaid and private insurance.
- To equitably reimburse physicians while providing primary care to SoonerCare.

Access to Care—Few recipients chose their own primary care provider during the allotted time and so were auto-assigned to physicians with whom they were unfamiliar and in many cases were located miles away from their homes, despite the fact that their hometown physicians, who had been providing their care previously, were participating physicians with SoonerCare.

Pediatricians were not included as "primary care physicians" but "specialists." The Health Care Authority determined that any eligible family member over the age of 14 would be auto-assigned to a pediatrician. Children's Clinic in Muskogee, which has provided the bulk of pediatric Medicaid care for years in their northeastern Oklahoma community, was excluded from the auto-assignment process for about 75% of their approximately 4,000 Medicaid patient population. In a letter presented to the OSMA Board of Trustees they stated, "On October 1, 1996, we became aware that SoonerCare had assigned only 1,241 patients to our five providers.... Virtually all of our patients continued to call and drop in for care even though SoonerCare had auto-assigned them to other providers. This mismatch of patients and providers caused tremendous calamity, confusion, and frustration in our office. By advising patients to change their enrollment, we expected November to be much improved. However, enrollment increased only slightly, to 1,562. And patients are still being assigned to other providers, even though the parents seek medical care for their children with pediatricians at Children's Clinic." During testimony they also noted that the "patients are unaware they have been auto-assigned to other providers and come to Children's Clinic for services. They are frustrated by the inability to receive services from providers which they have chosen repeatedly in the past. Frequently they are unable to reach the primary care provider to whom they are auto-assigned." One such physician lives in Tulsa and only keeps office hours in Muskogee on Tuesday and Thursday. He does not have privileges at Muskogee Regional Medical Center.

Other testimony from Jane M. Thomason, MD, Northern Oklahoma Regional Pediatrics in Ponca City, Oklahoma, described cases where the children in a family may not be assigned to the same doctor. One lady had twins and each twin was auto-assigned to a different physician in different towns. Patients have been assigned to a different doctor every month, even when they have not

Poison Control Center

Summertime... and the livin' is dangerous

It's summer, and many people are getting out the pesticides to eliminate unwanted pests and plants. When used properly, pesticides and herbicides help prevent disease and weeds; however, these chemicals can cause serious harm to people who use them incorrectly. The Oklahoma Poison Control Center at the University of Oklahoma Health Sciences Center College of Pharmacy and Children's Hospital of Oklahoma offers some safety tips for safe pesticide and herbicide use: Before buying or using any such chemicals, stop and read the label and always follow the directions carefully.



- Do not wear leather gloves, shoes, etc. when using chemicals because leather will absorb the chemical. Do wear long pants, a long-sleeved shirt, and shoes when applying chemicals.
- Do not use more than the specified amount; overdoses can harm you and your environment.
- Keep children and pets away from chemicals and treated areas: tell neighbors before using pesticides or herbicides so their pets and children will not walk in your yard.
- Never spray on a windy day and never smoke while spraying chemicals.
- Dispose of empty containers safely. Never burn boxes or sacks of pesticides or herbicides and never pour them down the drain.
- Wash with soap and water after using chemicals and launder your clothes before wearing them again. Hair also should be washed since it can trap and hold chemicals.
- If you spill pesticides or herbicides on your skin, wash with soap and large quantities of water and change your clothes *immediately*.
- Inhalation of pesticide or herbicide dust or vapor requires—ventilation—get outside and breathe fresh air. Take deep, slow breaths but be careful not to hyperventilate.
- If a pesticide is swallowed *do not* induce vomiting without contacting a physician or the Poison Control Center. Many pesticides come in forms which can cause more harm if aspirated into the lungs rather than simply being swallowed. Call or go the doctor or hospital at once and keep the pesticide container or label with you. It will be important to know the name of the product involved so that the correct treatment can be started.

Pesticides play a major role in poisonings. Each year, thousands of people are involved in common household pesticide-related poisonings. For answers to questions about pesticides, call the Oklahoma Poison Control Center at (405) 5454 in the Oklahoma City area, or 1-800-POISON-1 outside the metro area.

Who gets copies of medical records?

The state medical practice act [O.S. Title 76, Section 19 (A)] addresses the subject as follows: Any person who is or has been a patient of a doctor, hospital or other medical institution shall be entitled to obtain aces to the information contained in all the medical records of the person upon request, and shall be furnished copies of all records pertaining to that person's case upon request and upon the tender of the expense of such copy or copies. cost of each copy shall not exceed twenty-five cents ($0.25) per page. The physician, hospital or other medical professionals and institutions may not charges a fee for searching, retrieving, reviewing and preparing medical record of the person in order to determine which medical records are to be copied. Provided that this entitlement to medical records shall not apply to psychological or psychiatric records.

The licensure board reports that Paragraph #10 further provides that the failure to do this constitutes a misdemeanor. In addition, the board's own rules state: "Failure to transfer pertinent and necessary medical records to another physicians in a timely fashion when legally requested to do so by the subject patient or by a legally designated representative of the subject patient" [OAC 435:10-7-4(35)] constitutes unprofessional conduct.

The board noted in its March 1997 *Issues and Answers* newsletter that here have been few prosecutions for violations of these regulations, but said legal authorities hold that records cannot be held hostage to enforce payment of past bills, however justified those bills might be. The article also points out that nowhere does Title 76, Section 19 address a "financial restriction on contracts between physicians and third parties. There is a difference between a request by patients to produce records (covered by 76 (19)(A)) and permission by patients that medical information may be obtained by other (not covered)."

Ad Hoc Committee *(continued)*

requested any change. Some have even been assigned to two doctors at the same time.

Consequently, there has been much confusion in establishing exactly which physician has been assigned to which patient. Care has been rendered by one physician and the capitation has gone to another physician. When it is time for a patient or family to recertify, they go out of capitation to fee-for-service and the entire doctor selection process starts again. The patients don't receive their new Medicaid cards until after the first of the month and until then have no idea to whom they are capitated! Doctors' lists and patients' cards often do not match. The monthly capitation list has patients on it that are not even eligible for Medicaid for that month. Therefore they are seen and then retroactively reimbursement is refused! Other patients are added to the capitation list but the physician is not notified.

Many times patients are not able to afford the transportation to travel forty miles or more for care, so they go to the physician or hospital in their home town to receive care, which, of course, is unreimbursed. It was reported that emergency room usage has increased because of the lack of access to the assigned providers.

Improve Access to Early Care for Children

Capitation rates are based on an expected 38% utilization. However, contractual penalties are threatened if well child checkups (EPDST screening) do not reach the 80% mark. As noted, pediatricians are not considered "primary care providers" by the Health Care Authority; however, some of the providers to which this clinic's former patiens were auto-assigned had never done EPDST exams. Some have had to call to get information on a proper feeding schedule for an infant. If a patient has special needs, (i.e., an infant with reflux) best handled by a physician with a particular training, there is no way for that physician to select that patient. There is now documented evidence that a significant decrease in immunization rates has occurred in this patient population over the last 18 months because of the above described difficulties with access.

These physicians also face an ethical dilemma. "As pediatricians we feel responsible to meet the health care needs of children in this most vulnerable population. When patients are assigned to a physician not known to the family or to one out of town, where transportation and gas are a significant issue, the family often chooses no care or uses the emergency room for all primary care, with the subsequent delay in seeking medical care, hospital admissions and morbidity increase."

The Recipient Should Be Able to Choose a Primary Care Physician— Basically, in Oklahoma the physician/provider signs up to accept a specified number of patients (50–2,500). If a physician extender works with the doctor, more may be assigned. The patient is sent information on doctors signed up for the plan and may select a physician. If the patient doesn't pick a physician/provider, one will be assigned by computer. The physician is paid a set fee each month for every patient assigned to him or her regardless of the number of visits. The capitation fee is based on a 38% utilization rate. There is a one-month protest period, then the doctor-patient assignment is locked in for a year, or as long as the patient remains eligible under Title XIX.

In the Ponca City Clinic, however, the reality is that none of the physicians has received the number of patients which they requested. Statistically, only about 35% of the AFDC Medicaid patients seen in their office are captitated. Each month there is a variation in the number the patients capitated to them, and these patients may actually be capitated to different physicians in the group over a several month period. Only 50% of the patients assigned may be reserved for

previous patients and the physicians have no say in which patients are assigned to them. Consequently, long-time relationships with patients and their families have been severed. Special problem patients, which a particular physician may be better trained to handle may be removed from that practice altogether. Just because a patient has requested, or "chosen" a specific physician does not mean that they will be assigned to that physician. When patients sign up for Medicaid, it is done through DHS, not the Health Care Authority, therefore, inaccurate information has been given to them. For instance, they have been told that they cannot request a particular physician/provider even though that physician is a participant in the plan, and has unfilled slots available.

There is a 1-800 hot line to change doctors. However, one mother reported that she called 32 times before getting through. Even when they finally get through they are told that the OHA will call them back; however, the OHA usually do not. OHA did return one person's call at 11:30 p.m.

Referrals create an entirely different set of problems. In more than one instance the required Referral Form was completed and the patient's appointment set up in the following month. The next month, the patient was capitated to an entirely different physician in a different group and the original Referral Form was no longer valid. Therefore, the original physician had to call the new physician, explain all the history, health problems, and reasons for the referral to the new assigned physician who has never seen the patient, in order to generate a new Referral Form.

Karen G. Holman, MD, MPH, who works at Healing Hands Health Care, a clinic which provides primary care to homeless individuals of all ages writes: "Patients often do not understand the rules and limitations of SoonerCare. They come to the clinic because they are homeless. They are unaware that they have been assigned to another physician and must see that doctor. Staff time is required to explain all of this to the patient and then assist them in switching to me or arranging an appointment with their assigned PCP (Primary Care Provider). Also patients do not understand that referrals to specialists cannot be made solely upon their request. They become angry with me if I don't agree that referral is indicated. They blame me, not the system, for denying them care they believe the need. Some even switch to another PCP looking for the referral they want."

Regarding obstetric referrals she states, "Some physicians on the plans will not accept a pregnant woman covered under *presumptive* eligibility. This delays prenatal care until coverage is confirmed, which could take more than 60 days." If care is provided to a patient who is "presumed" to be Medicaid eligible, and then later determined not to be, that care is determined retroactively to be unreimbursable.

Integrated Medicaid now participates in all four Managed Medicaid plans. In Dr. Holman's letter she states, "The four plans use different forms and different procedures for obtaining consultation, prior approval, and so forth. Four different approved drug formularies means I must constantly check to see what I can use for a given patient. Different provider protocols add to the confusion.... Either the staff and I put in more time during the day or we see fewer patients—two difficult choices."

Keep in rnind that even the Medicaid fee-for-service amounts are discounted significiantly over true fee-for-service. Another factor, which has been described repeatedly in preceding paragraphs, is the mobility of the patients. In these first years of SoonerCare, patients may be auto-assigned to different physician/providers almost monthly! Therefore the likelihood that any physician would be able to recoup a percentage of the actual out-of-pocket expense over years is remote.

Medicaid Contract Concerns

There are significant and onerous problems with the Medicaid, SoonerCare contract. Some physicians were assured that some of these issues would not be required of them if they would sign up; however, those promises have not been fulfilled. Concerns include:

I. Access to Care: 24-hour coverage, 7 days a week. *"Any denials of referral or authorization for care must be made by a physician."* (This includes patients who are visiting in another city!)

Non-emergency care by the emergency room: Authorization is required.

This creates a terrible dilemma for the physician/providers. If they do authorize, they are punished by a deduction. If they do not, they are punished by liability and adversarial relationship with the patient.

II. Early Periodic Screening and Developmental Testing (EPSDT): Check-ups—80% compliance is required. If not, then contract renewal may be affected; monetary sanctions (unspecified) may occur; or if they are unable to see the physician/provider for check up, they (SoonerCare) will send the patient to another physician/provider and make you pay for the visits. "...[T]he loss will be deducted from the capitation payment in subsequent months."

III. Administrative Requirements: Section 2.7—"Conduct outreach to ensure that children are kept current with respect to their periodicity schedules." The problems with this are obvious. First of all, you don't even know for sure which patients are yours. Then you don't know what they already have had performed by another previous physician. (The paperwork, telephone time, and contact time is incredible.)

Section 2.8—(1) "Notice must be reported to OHCA of any member status changes, such as birth, deaths, marriage, and change of residence, and later clarified in attachment D when known. (2) "The PCP/CM shall be responsible for obtaining proper consent and transferring member medical records in the event that the member moves or changes primary care physicians." (With the tremendous transferability of this group, the patients should be responsible for obtaining their own medical records.)

Miscellaneous Areas: (1) The physician is required to use his/her State Title XIX Provider Number when billing fee-for-service and his/her PCP/CM Provider Number when billing for capitated charges. (2) In group practices, a

LETTERS

A Call for Universal Health Coverage

To The Editor: I am writing in order to commend Dr. Deckert and the State Board of Health in their efforts to improve the health of the citizens of Oklahoma. I would like to comment on several issues that were addressed in their article on the "State of the State's Health"[1] and furnish a few references that, hopefully, will be helpful to the Oklahoma Consortium for Improving the Health of Oklahoma (OCIHO).

I believe that I hear a call for universal health care coverage in their statement, "We need to assure access to quality health care services for all Oklahomans." Their perspective and presentation of the problem of the uninsured is consistent with the underlying thesis that we can *only* solve our problems with the health of our citizens after we establish universal coverage of health care, despite the fact that countries which have achieved "universal health care coverage" have not seen a corresponding increase in the quality of health care being delivered to their citizens.[2-4]

The statistics regarding deaths from motor vehicle accidents are indeed alarming, and it is my understanding that a high percentage of accidents resulting in fatalities are associated with alcohol use. It is also my understanding that a high percentage of homicides that occur in Oklahoma are related to illicit drug use and trafficking. It seems to me that these issues need to be addressed by tougher law enforcement, rather than interventions by the medical community.

Finally, the issue of teenage pregnancy relates to the high rate of unintended pregnancies, poor prenatal care, and poor postnatal care manifested by poor immunization rates and high rates of child abuse because of a lack of mature, responsible parenting. In 1987 the State Legislature initiated an effort to address the problem of the high rate of adolescent sexual activity as it related to the risk of contracting AIDS by passing HB 1476 which mandated AIDS prevention education be taught in Oklahoma Schools. The State Department of Education and State Department of Health developed an excellent set of guidelines for the curriculum that were similar to the CDC guidelines published in 1988.[5] According to a phone conversation that I had with the coordinator of the program at the State Department of Education, educators have essentially ignored those guidelines. After an extensive review of school based programs to reduce sexual risk behaviors, Kirby, et al., under the auspices of the CDC published their paragraph 1 of this subsection is the only method of preventing the spread of the virus;

3. sexual intercourse, with or without condoms, with any person testing positive for human immunodeficiency virus (HIV) antibodies, or any other person infected with HIV, places that individual in a high risk category for developing AIDS."

Senate Bill 1180, passed in 1994, which created the Interagency Coordinating Council for Prevention of Adolescent Pregnancy and Sexually Transmitted Diseases specifically called for the council to develop a plan which would include "A statewide public awareness campaign which extols the virtue of abstaining from premarital sexual activity. Said public awareness campaign shall not directly or indirectly condone premarital or promiscuous sexual activity."

I think it is important that as the OCIHO launches into the arena of addressing teenage pregnancy rates in Oklahoma, they should be aware of the current Oklahoma statutes that deal with the issue of adolescent sexual activity. They should be aware of what has already been done, and more importantly, they should be aware of what has *not* been done, despite the clear message contained in legislation passed in 1987 and in 1994.

The OCIHO should review the CDC report prepared by Kirby, et al. and should consider reviewing one of the four programs that have demonstrated effectiveness. I recommend Dr. Marion Howard's program, "Postponing Sexual Involvement"[7] be considered. Dr. Howard routinely travels around the country helping communities implement her program. I am sure she could come and meet with the OCIHO to address this issue in detail.

(continued on next page)

Ad Hoc Committee *(continued)*

modifier Q5 will have to be attached to each CPT code listed on attachment A of the contract if seen by another doctor in the group who is not the patient's PCP/CM. (Internal accounting is a nightmare.)

One of the difficulties cited by more than one group was the fact that only a small percentage of the eligible AFDC population is actually capitated. Those who are not capitated are still on fee-for-service; however, it is not necessarily obvious which is the case at the time of an office visit. A physician from McAlester who generally spoke positively about his experience did describe his frustration over the patient reduction; "Last year I saw over 2,000 individual patients with Medicaid and this year I only had 550 enrolled. However, around here, it seems like only about one-third of all possible clients are enrolled. I feel that the program has not done a good job of informing people about their choice of a doctor and their need to sign up. A lot of my patients are auto-assigned to my partner... and a lot of his are auto-assigned to me. Also, being in a rural area, we service a lot of outlying communities and I am concerned about the 30-mile referral, that we are losing a lot of patients that we have followed in the past, because they don't know that they can sign up with us."

Discussion

The degree of difficulty in coping with this complicated and confusing system has resulted in some physicians who initially agreed to participate in the SoonerCare program decreasing or discontinuing their involvement. The fact that these problems are being experienced when only a small portion of Medicaid

LETTERS (CONTINUED)

Improving the state of the state's health is a worthy goal. It is a reachable goal, as well, as long as the OCIHO focuses on making decisions and recommendations based on accurate data rather than based on promoting a particular sociopolitical agenda.

—Glenn P. Dewberry, MD
Oklahoma City

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Clarification of state HMO-Medicaid

To the Editor: This is in response to the article by Brandt and Broyles, "Medicaid: A Comparison of Oklahoma and Surrounding States, 1990-1994" [JOURNAL, Apr 97]. While the authors' conclusions may be accurate for the data available to them, they do not reflect what is actually occurring with the Medicaid HMOs in this state. In fact, at this point in time, the patients are not using the Medicaid system the way it was designed and there are large numbers of capitated dollars that are not being used for patient care. When and if patients do use the system the way it is designed, these authors should be better able to determine whether the system works or not. Right now there are hundreds of thousands of dollars that are not used for health care, but are going to provider organizations, because the patients either are unwilling or do not know how to access the system. The jury is still out on these HMOs. While cost is important to these companies, quality of care is not a consideration at all with these companies or the appropriate education would have been done in advance.

—William A. Grana, MD, MPH
Oklahoma City

On Nickles letter and Medicare benefits

To the Editor: I read your article "An Open Letter to Senator Don Nickles" [JOURNAL, Mar '97]. I am somewhat perplexed, however, by paragraph 4—"a lack of a means test, by involuntary conscription of patients." I would suggest that you think that through again. Every person has to pay into the Social Security/Medicare system. Shouldn't each person that pays in get the same benefits? Why should those who continue to work and pay into the system be discriminated against—that is after they are age 65 as I am?

—Ernest G. Warner, MD
Oklahoma City

Editor's Note: *Medicare's lack of a means test tells us the impoverished citizen's tax payments are seized to pay the medical bills of the prosperous elderly who have been conscripted into a program without choice. This is a Robin Hood reverse by our government as it takes from the poor to sustain the rich.*

We all want to think of Social Security as if it were insurance, but in reality it is a tax/welfare & health subsidy system unrelated to insurance.

—Ray V. McIntyre, MD
Kingfisher

Ad Hoc Committee (continued)

recipients are involved signals the potential for ever increasing difficulties when the entire Medicaid population is included, along with the aged, blind, and disabled population over the course of the five-year program.

A sharp decrease in reimbursement has been experienced in both the urban and the rural phases of SoonerCare. In many cases the Managed Medicaid level of reimbursement for services does not even cover overhead expenses of physicians' offices, despite the claims that provider reimbursement should be about the same as under the previous fee-for-service arrangement. Some physicians are actually leaving rural Oklahoma because they cannot survive with the low level of reimbursement. This portends a decrease in physician participation and availability, adversely affecting access to care to an even greater extent in the future.

A detailed explanation of this decrease in reimbursement is important because it illustrates the deficiencies in the planning of this program and has important implications for the rest of the health care delivery system in our state. Under the years prior to SoonerCare under discounted fee-for-service, physician charges were discounted approximately 35%. Since the advent of SoonerCare, hospital and physician reimbursement has been decreased by at least another 40 to 46%.

Based on figures provided by the Center for Health Policy and the Oklahoma Health Care Authority, during federal fiscal year 1994, prior to SoonerCare, approximately 284,003 AFDC recipients received care for an average of approximately eight recipient months per year (2,272,024 recipient months) at a cost of $331,739,273. This is an annual per capita cost of $1752. During this time there were significant restrictions on what services were reimbursed. Outpatient lab and x-ray costs were not reimbursed. Any office visit by an adult exceeding two visits per month were not reimbursed. Hospital bed days were limited to twelve days per year. The above figures do not include any administra-

Telemedicine: Oklahoma adopts strict new licensure rules for medical treatment employing electronic communication

By Eric S. Fisher

Effective November 1, 1996, Oklahoma became one of a growing number of states to adopt laws regulating the medical treatment of patients within the state by healthcare providers outside the state via' electronic communication. While the procedures performed via electronic communication range from basic interpretations of medical images to complex, remote invasive surgery, most of the procedures falling under the telemedicine moniker include various interpretive and diagnostic readings of medical images. Unlike other states which have adopted comprehensive telemedicine legislation, Oklahoma opted to modify its "practice of medicine " definition to include telemedical procedures and to require out-of-state healthcare providers to obtain an Oklahoma medical license to perform such procedures from outside the state. As a result of this legislative modification, out-of-state telemedical providers will find doing business in Oklahoma more difficult, and in-state healthcare providers may face added risks of liability.

Oklahoma amended its "practice of medicine" definition, found in the Allopathic Medical Licensure requirement section of Title 59, Section 492 of the Oklahoma Statutes, to include "performance by a person outside of this state, through an ongoing regular arrangement, of diagnostic or treatment services through electronic communications for any patient whose condition is being diagnosed or treated within this state." The definition also provides a jurisdictional trigger for the Oklahoma courts by stating that "[a] person who performs any of the functions covered by this paragraph submits themselves to the jurisdiction of the courts of this state for the purposes of any cause of action resulting from the functions performed."

A similar provision in the Osteopathic Medical Licensure requirement section of Title 59, Section 622 of the Oklahoma Statutes, was amended to read: [a] person within or outside of this state who performs through electronic communications diagnostic or treatment services within the scope of practice of an osteopathic physician and surgeon for any patient whose condition is being diagnosed or treated within this state shall be licensed in this state, pursuant to the provisions of the Oklahoma Osteopathic Medicine Act.

Likewise, this osteopathic licensure statute includes a jurisdictional trigger identical to the allopathic provision.

The effect of these licensure requirements will be to protect the interests of in-state healthcare providers from a growing trend in medical treatment, and to assure that Oklahoma licensure standards are met by all healthcare providers. While the number of announced and actual telemedicine programs is relatively low (29% of the nation's rural hospitals have or will have telemedicine programs within one year), the groundswell of support for such technology may be perceived as a threat by some rural physicians and even some physicians in major Oklahoma markets. For the rural physicians, an increasing number of diagnostic procedures performed outside their communities means less business in their rural healthcare settings. As for the urban physicians, they too risk losing diagnostic business to larger metropolitan healthcare centers where there may be greater economics of scale.

From the patient's perspective, telemedicine presents a dual-

Ad Hoc Committee *(continued)*

tion expenses, but simply represent the stated expenses for care given by providers to the AFDC population during that twelve-month period.

During the first twelve months of SoonerCare, 65,000 AFDC recipients received care for 456,607 recipient months (which was about seven months of the year per recipient) at a cost of $45,723,299. This extrapolates to an approximate per capita cost of $1205. This payment reflects the amount paid to HMOs in premiums to provide the comprehensive benefits package required under the waiver. This is a 31% decrease before the HMOs subtract their administrative percentage, another 9 to 15%. Therefore, provider reimbursement was as much as 46% less under SoonerCare the first year, even though providers were required to provide more services compared to those required under the previous discounted fee-for-service arrangement.

By comparison, Wisconsin, which already had a more comprehensive program in place, transitioned without changing the level of service, and they reduced their amount paid for medical services by only 90%. [10%? —Ed] According to Mr. Kevin Wymore, policy analyst of the Wisconsin State Medical Society, this arrangement has not been a significant problem for Wisconsin physicians. Some of the policies of the Wisconsin Plan include:

1. There must be at least two HMOs serving the patient's service area. If there are not two they may choose an HMO or remain fee-for-service.

2. Access Standards: 20 miles. Therefore enrollees can not be forced to go to a provider greater than 20 miles from their residence and the recipient may request an exemption from mandatory HMO enrollment.

3. Benefits to the physicians for participation include: no Medicaid billing requirements; enrollees are locked into the HMO for medical care for 6-month periods after the open enrollment periods, thus allowing for greater continuity of care since they have found that

Telemedicine *(continued)*

edged sword. On one hand, they have access to other, perhaps more knowledgeable, healthcare providers who previously were only available if the patient was willing and able to travel to another city or state. On the other hand, the out-of-state healthcare providers may be less accessible for misdiagnoses or mistreatments occurring outside the jurisdictional reach of Oklahoma. While the treatment of a patient in Oklahoma arguably could satisfy the minimum contacts requirement necessary to exercise jurisdiction over an out-of-state healthcare provider, Oklahoma's amended licensure and jurisdictional provisions relating to telemedicine will help patients avoid such litigational impediments in claims against out-of-state telemedical providers.

Although the revised licensure provisions establish a sizable price of entry for potential out-of-state telemedical providers, both the allopathic and osteopathic licensing requirements have exceptions for occasional telemedical consultations by non-Oklahoma-licensed healthcare providers.

"[h]owever, in such cases, a nonresident osteopathic physician who, while located outside this state, consults on an irregular basis with a physician who is located in this state is not required to be licensed in this state." The osteopathic exception is explicit in its language, providing that:
The allopathic statute, however, provides an exception by implication in its definition of the practice of medicine through electronic means to include only "ongoing regular arrangement[s]" for telemedical procedures. Thus, any sporadic consultations would fail to qualify as the practice of medicine requiring Oklahoma licensure. Nevertheless, the jurisdictional trigger would still apply and a healthcare provider performing even one consultation in the state via electronic communication would be subject to this state's jurisdiction.

Finally, both the allopathic and osteopathic licensure statutes include provisions imposing liability on healthcare providers who aid in the unlicensed practice of medicine in Oklahoma. Thus, by seeking on a regular basis the telemedical consultation of an out-of-state healthcare provider who is not licensed in Oklahoma, individual healthcare providers, hospitals, or telemedical facilities expose themselves to potential liability under these revised statutes.

Although several healthcare commentators have opined about the necessity for federal telemedicine guidelines, no definitive plans have been publicly announced. While the American Medical Association's House of Delegates has officially recommended that physicians be licensed in any state in which their patients are located during consultation or treatment, there is no consensus among the state medical governing bodies. Oklahoma, like ten other states, has made its position clear, i.e., if you plan to consult patients within the borders of Oklahoma on a regular basis via electronic communication, you must obtain a license to practice medicine in Oklahoma. J

Mr. Fisher is an attorney with the Oklahoma City firm Crowe & Dunlevy. This article appeared in the firm's Healthcare Legal Update.

Ad Hoc Committee *(continued)*

patients are most satisfied when they remain with their current physician.

The information from Wisconsin provides a perspective concerning the final issue that needs to be addressed. The Oklahoma Health Care Authority has placed much of the blame for the ills of the SoonerCare program on the computer system, i.e., auto assignment problems, etc. Unfortunately, many of the problems identified in this report are intrinsically related to policy positions of the Health Care Authority which have been programmed into the computer, rather than solely computer-generated problems.

This year the Senate is considering Senate Bill 639 which expands Medicaid eligibility to cover an additional 125,000 children. The Senate calculates that this will cost around $60 million, which averages out to approximately $480 per child per year. This is 57% less than the 1994 per capita cost of specifically caring for a child on AFDC, which was $1114.

The OSMA House of Delegates heard testimony from physicians and from this committee at its annual meeting on April 24-27, 1997. They adopted a Resolution which reads:

RESOLVED, that the OSMA meet with the Legislative Oversight Committee to address these serious issues and develop solutions; and be it further

RESOLVED, that the OSMA JOURNAL publish the report of the Ad Hoc Committee; and be it further

RESOLVED, that OSMA members contact their State Representatives and Senators to inform them of these issues and that any dollars saved from managed care should be reinvested in patient care; and be it further

RESOLVED, that the OSMA, working in conjunction with the state legislature, seek to reorganize the Health Care Authority so as to reintroduce traditional values in medicine and work towards re-establishing the traditional patient-physician relationship; and be it further

RESOLVED, that the new Health Care Authority allow patient choice of provider, both physician and hospital, and will engender responsibility in the patient; and be it further

RESOLVED, that the OSMA instruct our American Medical Association delegates to work with other states that have received a waiver from HCFA (Texas, Tennessee, Hawaii, California) for managed Medicaid and inform HCFA that the waiver system has not demonstrated its objectives in improving care for patients.

Conclusion

This brief analysis of the first eighteen months of the HCFA managed care demonstration project in Oklahoma, SoonerCare, identifies a number of serious deficiencies with the program. Few public officials are aware that these problems exist. As physicians we must collect more

Deaths

Roy Lawrence Neel, MD
1905 - 1997

Retired Oklahoma City radiologist Roy L. Neel, MD, a native of Roby, Texas, died May 19, 1997, in California. Dr. Neel was a 1938 graduate of the University of Oklahoma School of Medicine. After an internship in Chicago and a residency in Galveston, he established a practice in Oklahoma City in 1953. During World War II, Dr. Neel served on active duty with the U.S. Army Medical Corps for 41 months, 15 of them overseas. At the time of his discharge he held the rank of major.

Vester Meade Rutherford, MD
1907 - 1997

OSMA Life Member Vester M. Rutherford, MD, a native of Pope County, Illinois, died April 7, 1997, in Midwest City. He was a 1932 graduate of the University of Oklahoma Medical School and had a general practice in Midwest City for many years. During World War II, Dr. Rutherford was on active duty with the U.S. Army, serving a total of 40 months, with 27 of them overseas. He held the rank of major at the time of his discharge. In 1946, after the war, Dr. Rutherford set up his medical practice in Midwest City. Previously he had practices in Woodward and Pryor.

George Rainey Williams, MD
1926 - 1997

G. Rainey Williams, MD, arguably the most respected physician in the state of Oklahoma, died Sunday, April 20, 1997, at his home in Oklahoma City. Dr. Williams, as chairman of the University of Oklahoma Department of Surgery, was a mentor to the university's medical students for three decades. His strong leadership and dedication to medicine in Oklahoma was instrumental in guiding the OU Health Sciences Center through years of political turmoil and financial hardship to the position it enjoys today. Dr. Williams was born in Atlanta, Ga., and moved to Oklahoma in 1944. He earned his medical degree at Northwestern University and completed an internship, fellowship, and residency at Johns Hopkins. During the Korean conflict he served as a first lieutenant in the U.S. Army Medical Corps. Dr. Williams joined OU's clinical staff in 1958. A detailed biography of Dr. Williams appeared in the OSMA JOURNAL in June 1996 as part of the JOURNAL's Leaders in Medicine series.

Speaking for the OSMA at the Annual Meeting in Tulsa, President David M. Selby, MD, said:

"The medical communities of not only Oklahoma, but also the entire nation, suffered an immeasurable loss with the passing of Dr. G. Rainey Williams. The 'Professor,' as he was known, with his unsurpassed surgical and teaching abilities, leaves to the citizens of our state and nation a legacy of well-trained, dedicated, and caring physicians.

"Dr. Williams was greatly respected by all with whom he came in contact; he was held in the highest esteem by his colleagues, deeply loved by his friends and family. He will be sorely missed"

Memorial contributions can be made to the G. Rainey Williams Research Professorship. Contact Lana Ivy at the University of Oklahoma Health Sciences Center Development Office, 405-271-2300 for further information.

Ad Hoc Committee *(continued)*

specific data regarding the decrease in access to care; decrease in immunizations and other measurable factors. We must begin to educated state leaders about the problems so that solutions can be instituted now. These leaders and the general public must become informed that the quality of health care provided to the Medicaid population and ultimately to all Oklahomans is at risk if corrective action is not taken.

Mary Anne McCaffree, MD, Chair
Rebecca G. Tisdal, MD
Bruce L. Storms, MD
Glenn P. Dewberry, MD
D. I. Wilkinson, MD
Herbert Rowland, MD
Jane M. Thomason, MD

Classifieds

Classified ads are 50 cents a word, with a minimum of $25 per ad. A word is one or more characters bounded by spaces. Box numbers will be assigned upon request and will add 6 words to the total. *Payment must accompany all submissions.* Orders will NOT be accepted via telephone or fax. Mail ad with payment to OSMA JOURNAL, 601 West I-44 Service Road, Oklahoma City, OK 73118. Deadline is the first of the month preceding the month of publication.

Physicians Wanted

Excellent opportunity for BC/BE Internist to join 32-person multi-specialty group practice with two satellite clinics. Physician owned and directed for over 25 years. Beautiful progressive community located 25 miles East of Oklahoma City. Opportunity offers excellent compensation and benefit package. Partnership available. Please send C.V. to: Denise Roper, Shawnee Medical Center Clinic, 2801 N. Saratoga, Shawnee, OK 74801 or fax (405) 273-2632.

PRIMARY CARE PHYSICIAN. Full-time faculty positions in the Department of Internal Medicine, the University of Oklahoma College of Medicine - Tulsa to begin July 1, 1997. Responsibilities include teaching house staff and students, and clinical patient care. Interest in ambulatory research is desirable. Applicants should be board-certified or board-eligible in internal medicine and have demonstrated an interest in academic medicine. Reply with CV: Michael Weisz, MD, University of Oklahoma, 2808 S. Sheridan, Tulsa, Oklahoma 74129. Applications will be reviewed beginning April 1, 1997. The University of Oklahoma is an equal opportunity/affirmative action employer.

CLASSIFIEDS (CONTINUED)

Physicians Wanted *(continued)*

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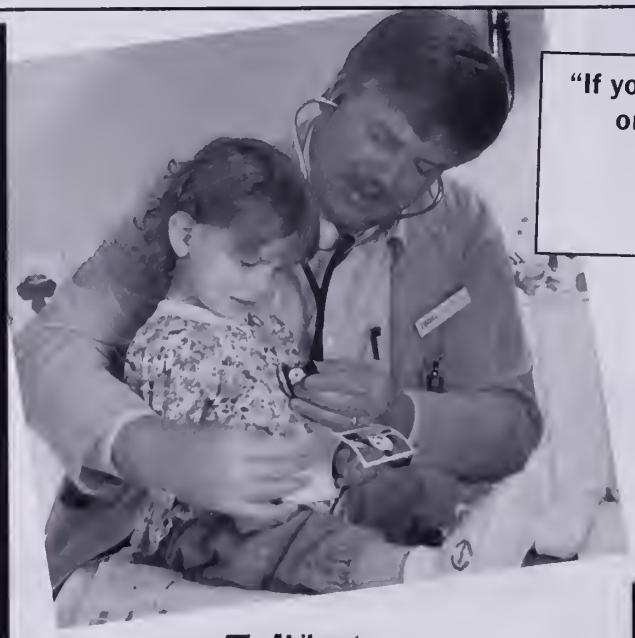
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Since 1907, Oklahoma physicians' spouses have banded together to assist the Oklahoma State Medical Association in its program to improve the quality of life through health education and services. The medical profession as well as the Alliance have gone through a lot of changes since then. There are more female physicians than ever before in the history of medicine and so we now have male physician's spouses in the Alliance, which is wonderful. Our goal is not only to improve the quality of life through health education and services but to protect the future of medicine. We must be an advocate for medicine and medical patients. As we begin the new Alliance year for 1997-1998, we will continue to focus on four main areas.

AMA-ERF

AMA-ERF (American Medical Association-Education and Research Foundation) the total amount of funds raised for medical schools last year was almost $39,000. As of the end of February 1997 we have raised close to $28,000. We will continue to raise funds in support of our medical students who will be our physicians of the future. I hope you were generous when we had our Basket Auction at the State Convention. You will have other opportunities to support the AMA-ERF either through Christmas Card Sharing, Doctors' Day, or through Memorials. Remember, contributions to AMA-ERF are more than just charitable donations, they are a legacy from one generation of medical professionals to the next and an investment in the future of medicine.

Health Promotion

As physicians' spouses we promote healthy life styles for our communities and strive to leave a favorable, lasting, impression through health projects that impart to our communities who we are and what we stand for. Anti-violence programs such as SAVE (Stop America's Violence Everywhere) has been for the last two years and will continue to be a major health promotion, along with SAVE-a-Shelter, a program to support or provide a shelter for abused and battered women and children. We will also continue to distribute "Shape Up for Life" children's workbooks teaching conflict resolution; "Be a Winner"; "I Can Choose"; "I Can Be Safe"; along with "Hands Are Not For Hitting"; child abuse prevention; drug use and abuse; healthy mother, healthy baby; teen pregnancy prevention; teen suicide; eating disorders; and breast cancer awareness are some of the many health projects we promote.

Legislation

Never before has it been so easy to stay informed on all legislative issues that affect medicine and never before has it been so easy to inform our legislators of our views on proposed laws. Through e-mail, fax, and the Internet, we are able to have a greater impact on legislation in our own state as well as nationally.

We are very fortunate to have "Legislative Express," published monthly by Sherry Strebel, who is becoming a household name when it comes to keeping medical families informed on legislation going through the Oklahoma House and Senate. Also, when we attend the AMA Alliance Confluence I and II in Chicago, we not only receive in-depth leadership training but we are provided with extensive legislation information along with handbooks on legislative advocacy, grassroots tools, and how to become a candidate.

Membership

Membership is vital to the success of any organization, and recruitment and retention are the most challenging aspects of Alliance involvement. The Alliance has a vital place in today's world, more vital than ever before. We have made a significate impact over the years through fund raising for medical education and research; health promotions from immunizations to "Breast Cancer Awareness" and "Stop America's Violence Everywhere," and we are having a greater impact on legislation.

The Alliance will continue to promote better health for all, support the medical profession and offer friendship, support, and understanding to each other.

We encourage *all* physicians' spouses (male and female) to become active members of the Alliance. If you cannot be an active member, at least become an active supporter of our projects, and the efforts of other physicians' spouses across the state, with your dues.

The Alliance wishes to thank the Oklahoma State Medical Association members for your continued participation in and support of our programs.

—Doris Edge, President

THE LAST WORD

■ **This month's JOURNAL, the May-June 1997 issue, marks** the beginning of a new bimonthly publication schedule (see Editorial). Lacking enough quality manuscripts to provide a high caliber publication twelve times a year, the Editorial Board, with the approval of the Board of Trustees and House of Delegates, reluctantly opted to cut back to a bimonthly publishing schedule. The goal, of course, is to continue providing you with the same quality publication you have always received. In addition, much of the JOURNAL will be online by the end of the summer, making it available to you on the Internet at <www.osmaonline.org>.

In other changes, the July-August issue once again will feature the full proceedings of OSMA's Annual Meeting in April. This complete account was discontinued in 1992 but is being reinstituted in order to keep members fully apprised of the association's activities.

■ **Stan Pelofsky, MD, Oklahoma City, has been elected** secretary of the American Association of Neurological Surgeons (AANS). He took office during ceremonies held in April at the organization's Annual Meeting in Denver. Dr. Pelofsky is chief of Neurosurgery at St. Anthony Hospital and holds appointments as assistant professor, Division of Neurosurgery, at Oklahoma Memorial Hospital, Veteran's Administration Hospital, and Oklahoma Children's Hospital. Dr. Pelofsky has served the AANS as chair of the Quality Assurance Committee, president of the Joint Council of State Neurosurgical Societies, and as a member of the Governance Committee. In addition to his work with the AANS, he has served as president of the Oklahoma State Neurological Surgery Society and of the Central Oklahom Council of Hospital Medical Staffs. Dr. Pelofsky also received a gubernatorial appointment to the State of Oklahoma Advisory Council on Traumatic Spinal Cord and Traumatic Brain Injury.

■ **The May issue of *Tulsa Medicine* reports that Jerry L.** Puls, MD, Tulsa pathologist, has been appointed to the Long Term Care Authority by the Board of County Commissioners. In addition, George M. Pikler, MD, Tulsa oncologist, has been elected president of the Hispano-American Biomedical Association. The organization represents physicians from North, Central, and South America.

■ **Julie T. Parke, MD, director of the Muscular Dystrophy** Association's clinic in Oklahoma City, has been named one of "America's Best Doctors" in the nationwide guide of the same title. Dr. Parke is listed for her expertise in child neurology. Inclusion in the guide is based on survey responses of some 35,000 physicians who were asked to rank the clinical abilities of their peers.

■ **The Oklahoma Medical Political Action Committee (OMPAC)** held its Annual Meeting on April 25, 1997, during the OSMA Annual Meeting in Tulsa. Mike Hess, from AMPAC headquarters in Washington, DC, attended in order to present OMPAC with a National AMPAC Membership Award.

New OMPAC board members were elected at the meeting and they are: Drs. Warren V. Filley, Perry A. Lambird, James D. Funnell, Mukesh T. Parekh, J. Chris Carey, Matthew J. Britt, Gary Massad, Matthew J. Britt, and Gary F. Strebel, Oklahoma City; Jack J. Beller, Chester L. Bynum, Charles L. Lackey, and Jodie L. Edge, Norman; Greg Ratliff, David L. Harper, Douglas C. Hubner, Lee E. Schoeffler, and C. Wallace Hooser, Tulsa; Bruce L. Storms, Chickasha; J. Ross Vanhooser, Elaine N. Davis, and David M. Selby, Enid; Richard J. Boatsman, Lawton; Joe S. Hester, Jay A. Gregory, and Timothy D. Robison, Muskogee; Richard B. Winters, Poteau; Gary L. Paddack, Ada; and Jeffrey T. Shaver, Edmond. Also elected to the board were Barbara Jett and Sherry Strebel, Oklahoma City.

New officers elected at the meeting were Dr. Shaver, chair; Dr. Gregory, vice-chair; and Mrs Strebel, secretary-treasurer. Dr. Harper and Dr. Boatsman also will serve on the Executive Committee.

It was also announced that OSMA Membership Coordinator Judy Lake will be assuming the duties of OMPAC Director and staff liaison for the Council on Governmental Activities.

■ **The AMA has launched a new consumer Website, provid**ing the public with daily health and medical news, first aid information, and more. The user-friendly site, AMA *Health Insight,* features information on adolescent and women's health and a "point and click" tour of the human body. AMA House Speaker Dr. Corlin said, "With the advent of AMA *Health Insight,* the AMA has put a wealth of health and medical knowledge at the fingertips of our patients. The American public must be partners with their physicians in those important decisions that concern their health. AMA's *Health Insight* can be an important and empowering educational tool in the process." Other features include heart healthy recipes and an interactive patient history form to prepare patients for a doctor visit.

■ **W.F. Phelps, MD, chair of the OSMA Board of Trust**ees, has selected the following dates for the coming year's meetings. In an attempt to make board meetings easily accessible to more physicians across the state, meetings have been scheduled in several locations: July 13, 1997, Enid; October 19, 1997, Oklahoma City; January 18, 1998, Tulsa; April 23, 1998, Oklahoma City.

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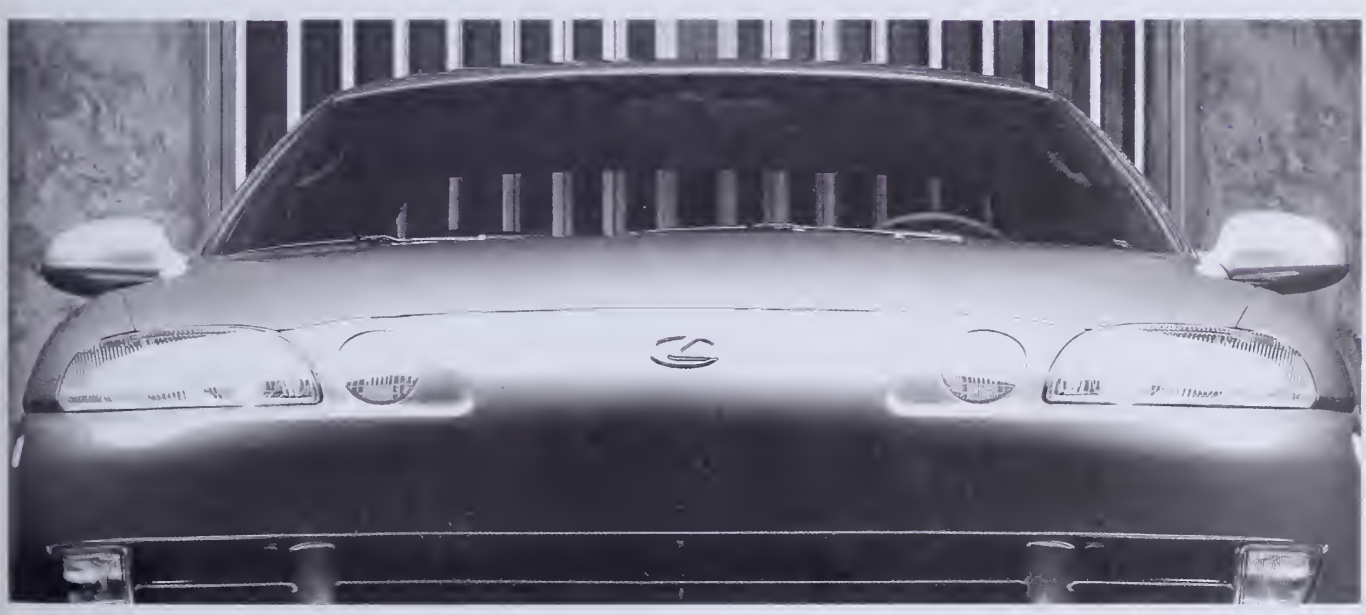
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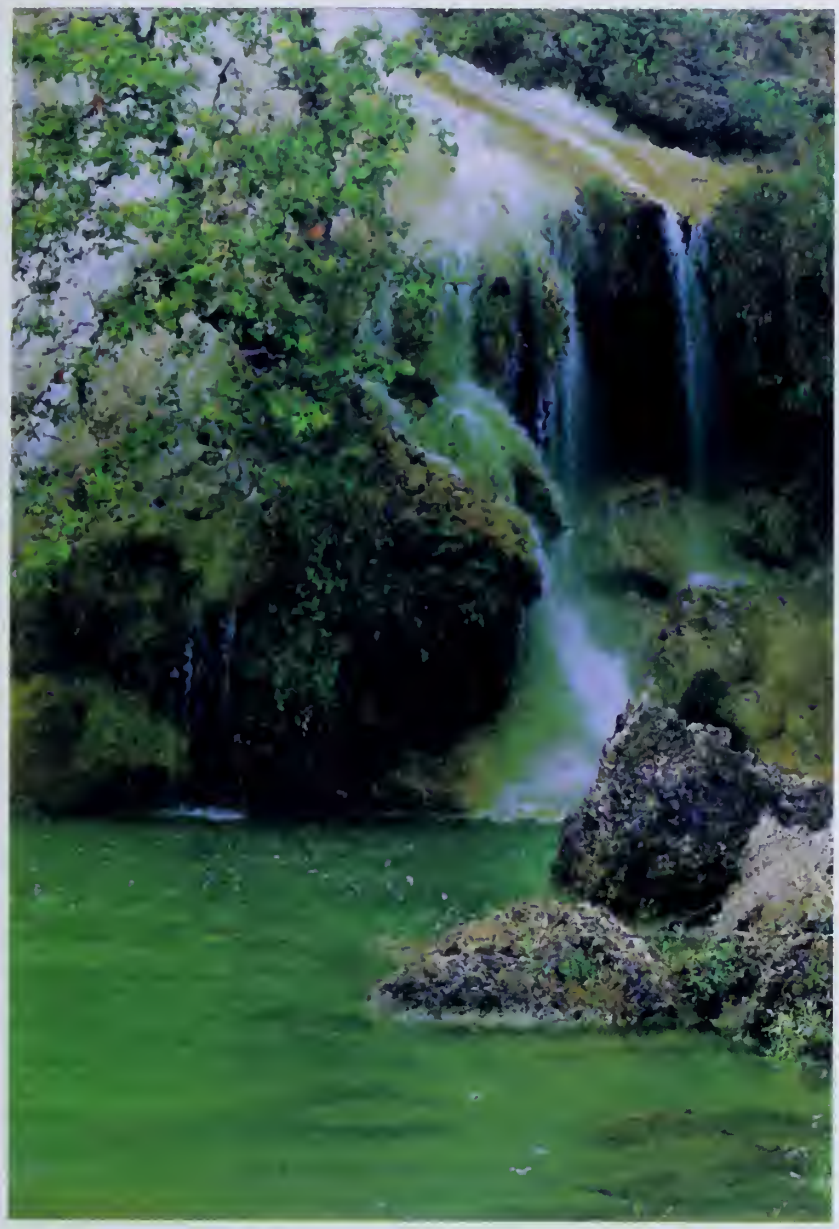
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JOURNAL

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JULY/AUGUST 1997 VOL. 90, NO. 6

EDITORIAL

On Managed Care 215
R.V. McIntyre, Kingfisher

PRESIDENT'S PAGE

The First 100 Days 217
D.M. Selby, Enid

SCIENTIFIC

The Cooperative Cardiovascular Project in Oklahoma 219
D.W. Bratzler; A.C. de Leon, Jr.; M.C. Johnson; W.H. Oehlert; R.C. Slagle; C.K. Murray; L.J. Bumpus; J. Webb; Oklahoma City

Methicillin-Resistant *Staphylococcus aureus* at a Veterans Affairs Medical Center (1986-96) 228
D.J. Flournoy, Oklahoma City

SPECIAL

Professional Resistance to Managed Care in Oklahoma: An Issue of Quality 236
R. Perry, J.M. Pontious; Enid

Euphemism in the Language of Managed Care 243
H.F. Stein, Oklahoma City

ANNUAL MEETING PROCEEDINGS

Proceedings 259
Index to Proceedings 262

NEWS

OHCA responds to OSMA's concerns and resolutions on SoonerCare, 335... AMA celebrates Women in Medicine Month, 337... Report of the AMA delegation to the OSMA board, 339... Keating signs CME bill into law, 341

DEPARTMENTS

Health Department, 248... Letters, 342... Deaths, 343... In Memoriam, 343... Classifieds, 344... The Last Word, 352

ABOUT THE COVER

Robert M. Smith, MD, Oklahoma City, started with a photograph of Turner Falls and, using special computer filters and dye sublimation printing techniques, produced what more nearly resembles an Impressionist painting.

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On Managed Care

As the twentieth century draws to a close, when we glance into the rear-view mirror at the history of mankind, we see a melange of good and bad, of progress and regression. Our human propensity to wage war may have waned slightly with the coming of the atomic age, but it also seems that our moral rectitude and our cultural conviviality has lessened during the passing century. On the other hand, we physicians may note with satisfaction that the science of medicine has attained near-miraculous achievements. The Golden Age of scientific medicine has come to be.

In the midst of technical excellence in medicine, however, it is disconcerting to realize that the purveyance of medical care to the patients has not kept up with the scientific advances. The present hodgepodge of government and insurance programs purporting to aid the patient in obtaining medical care is a clear signal that our society has not yet solved the economic difficulties of the citizen who is in need of medical care. Today's salaried worker must have a good medical insurance in the benefit package, and the insurance industry and the physicians have fought for forty years about the definition of "good medical care."

The insurance industry has pre-empted, one insurance policy at a time, the medical profession's authenticity in planning patient treatments, and has established a de facto economic credentialing of physicians with the burgeoning "managed care" medical insurance policy.

It is of interest to note that very few patients actively select "managed care" policies from the marketplace, but in most instance the insurance broker sells the "managed care" policy to an employer who includes the policy in a salary benefit package.

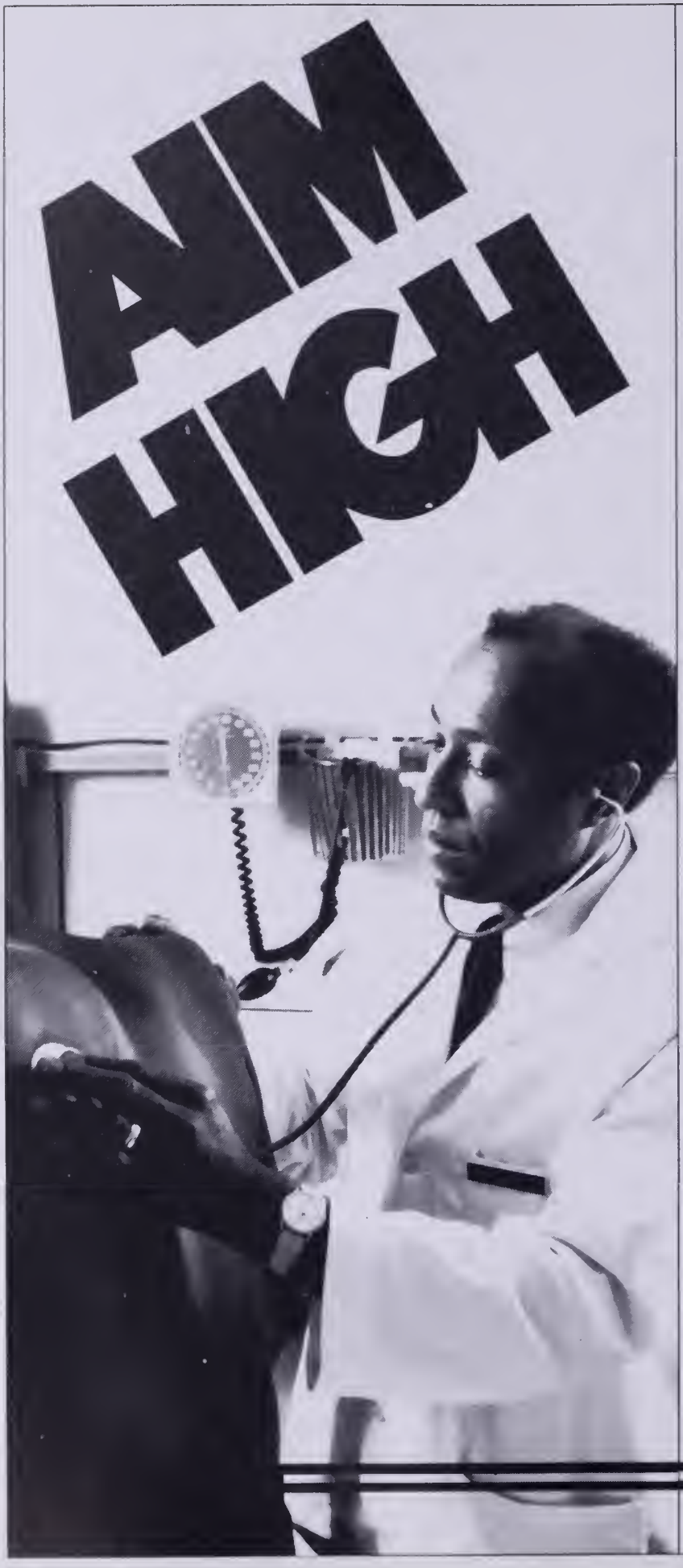
That the employer is able to reap a tax benefit from paying for these medical insurance premiums is a significant force driving the development. Our tax laws are notoriously unfair in this setting, as the self-employed, unemployed, and salaried workers paying their own medical insurance premiums are treated much less generously by Uncle Sam. Congress has not yet grappled with this unjust aberration in our tax law that drives the "managed care" crusade, and that crusade will doubtless continue to roll on until the tax law is reformed.

Thus we may posit that the "managed care" insurance policy, in the longer view, is the current insurance industry device to stay profitable until the time when most citizens become prosperous enough to control the purchase of their own health care. Until that happy day arrives, we physicians must be ready for many abrasive relationships with the politicians and insurance brokers, and even with some patients. We must hang onto the idea that we, not the accountants, know how to practice medicine, and that the medical profession has long been an exemplar of altruism in this old world.

Ray V. McIntyre, M.D.

The insurance industry has pre-empted, one insurance policy at a time, the medical profession's authenticity in planning patient treatments...

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AIR FORCE

The First 100 Days

Association headquarters has been extremely busy since the OSMA Annual Meeting in Tulsa, and as your president I've had the opportunity to oversee and be directly involved in many of the activities. Your staff has been working diligently and together we have kept open very active lines of communication. As a result, any requests for action have been handled responsibly and as quickly as possibly.



As a result of Dr. Boyd O. Whitlock's election as vice-president, Dr. Bruce L. Storms was elevated to the position of Speaker of the House of Delegates. Therefore, one of my first duties was the appointment of a new vice-speaker to complete the remainder of Dr. Storms' term and I am delighted to report John R. Bozalis, MD, has graciously accepted this appointment.

During the past three months, I have also had the opportunity as OSMA president to nominate several physician members to serve on various councils and boards, both locally and nationally. In a letter to AMA Executive Vice-President John Seward, MD, Kautilya A. Mehta, MD, was nominated to the AMA's Governing Council of the International Medical Graduates (IMG) Section. In a letter to Governor Keating, Jerry L. Puls, MD, Tim K. Smalley, MD, and William E. Dieker, MD, were nominated to fill a vacancy on the Board of Medical Licensure. The OSMA was recently informed that Dr. Puls had been appointed to this position. James D. Funnell, MD, and Edward N. Brandt, MD, have been nominated to serve on an advisory committee for the Oklahoma Pharmaceutical Board to discuss changes in the Pharmacy Board rules.

One of the primary projects during my presidency is the search for a new executive director for the OSMA. Several meetings of the search committee have occurred and on the Sunday following the OSMA Annual Meeting, the search committee interviewed the firm of Witt/Kiefer, Ford, Hadelman & Lloyd. Subsequently the firm was retained for the search process and has been actively working on the project. On May 19, representatives from Witt/Kiefer traveled the state of Oklahoma to interview physician members of the search committee, key staff members from the Oklahoma and Tulsa County Medical societies, Rod Frates from PLICO, and the OSMA staff. In a recent update from Witt Kiefer, it was indicated they have made over 200 initial contacts and are narrowing down the list of candidates; they expect to provide recommendations for consideration by the search committee by early fall.

Due to last May's change in the Medicare carrier from Aetna to Blue Cross/Blue Shield, delays in payment and other reimbursement problems have developed for physician offices. Medicare Director Lanny Day, who has been most cooperative, has assured OSMA that problems with physician reimbursement are in the process of being eliminated. Per my result of a request, Mr. Day has indicated the procedure of sending confirmation letters after claims are received will once again be implemented. In an attempt to avert any other potential problems with the carrier change, I have appointed an ad hoc committee to serve as a liaison between Blue Cross/Blue Shield and the OSMA and have asked Raymond L. Cornelison, MD, to serve as chairman, and Matthew J. Britt, MD, to serve as vice-chair.

In the past few weeks, a complete review has been made of all OSMA councils and committees, and chair appointments have been made. A complete listing of members of these committees will be published in the August *OSMA News*. It is appropriate as we advance through the year reviewing our council and committee procedures that nothing be set in stone; therefore, I will be suggesting bylaws changes to the OSMA Bylaws Committee, which is chaired by Bruce L. Storms, MD, in an attempt to help our councils function more effectively.

As a example and pursuant to my goal to coordinate and bring our communication efforts under a single council, the previous Council on Professional and Public Relations and the Editorial Board of the OSMA *Journal* will become one council, necessitating a bylaws change. The new council, tentatively named the Council on Publications, Communications, and Public Relations, is chaired by DeWayne M. Andrews, MD, with Roger Sheldon, MD, serving as vice-chairman. The initial meeting of this council outlined appropriate directives, and goals have been

A complete review has been made of all OSMA councils and committees, and chair appointments have been made.

President's Page *(continued)*

The most significant accomplishment was the announcement... that under Oklahoma law only licensed medical doctors are authorized to perform surgery using lasers.

developed to implement and incorporate many of the projects suggested earlier this year by the Council on Long Range Planning and Development.

Also during this period, weekly contacts have continued with John Montgomery, our Washington lobbyist. In addition, many letters have been written to the Oklahoma Congressional Delegation in Washington regarding Medicare reform bills currently under consideration. In mid-September, Council on Governmental Activities Chairman Richard J. Boatsman, Acting Executive Director Kathy A. Musson, and I will be traveling to Washington to attend the AMA's Grassroots Conference and will be make personal contacts on the Hill.

The most significant accomplishment was the announcement by Oklahoma District Judge Eugene H. Mathews' ruling that under Oklahoma law only licensed medical doctors are authorized to perform surgery using lasers. The ruling overturned a 1993 decision by the Oklahoma Board of Examiners in Optometry which allowed optometrists to use lasers. Judge Mathews' ruling clarifies the surgery issue and protects the public. This is a major scope of practice victory for all of us.

In June, all 16 AMA delegates and alternate delegates, OSMA staff members Kathy Musson and Barbara Matthews, and I attended the AMA's 150th Anniversary Annual Meeting in Chicago. I also took the liberty of asking Edward N. Brandt, MD, chair of OSMA Council on State Legislation and Regulation, to attend this meeting—a small reward for his many, many hours of dedicated service to the OSMA. On Saturday evening during the meeting, all Oklahomans, including representatives from the OSMA Alliance, Organized Medical Staff Section, Young Physicians Section, and Medical Student Section, had the opportunity to come together for dinner and an enjoyable evening. As mentioned in an earlier President's Page, we can all be extremely proud of our delegation in this labor of love and absolutely worthwhile endeavor.

As stated previously, I am always available for your comments, suggestions, and criticisms. And as always, thank you for the privilege of serving as your president.

Dana M. Kelly, M.D.

The Cooperative Cardiovascular Project in Oklahoma

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Background and Objectives: Acute myocordiol inforction is the leading cause of death in the United States and a camman couse for odmission of Oklahama Medicare beneficiories. Bosed on guidelines far the monagement of ocute myocordial infarctian published by o joint committee af the Americon College af Cardiology ond the American Heort Assaciatian, the Cooperative Cardiovasculor Project wos developed by the Health Core Finoncing Administrotion to measure performance an quolity indicatars thot describe core pravided to Medicare beneficiories. The objective af the project is ta use thase performance measures ta assist hospitols in the development af quolity impravement efforts far acute myacardiol inforctian care.
Methods: Retraspective review wos performed an the inpatient medical recards of 3,436 potients fram 102 hospitals in Oklahomo ond a random natianal somple af 2,441 patients dischorged with o principal diagnosis of ocute myacardial infarction.
Results: The diagnasis of ocute myacardiol inforction was confirmed in 3,055 (89%) of the cases reviewed. Far potients cansidered to be ideal condidates far an interventian, 62% received reperfusian therapy (thrambalytic or PTCA), 84% received ospirin during the haspitalizotian, 76% received aspirin at discharge, and 40% received beta-blockers at discharge. There were significant variations in performonce between haspital peer groups in the use of reperfusian theropy, aspirin, beta-blockers, and smoking cessatian counseling.
Conclusions: Potentiolly life-saving treotments for Medicare patients haspitalized with on ocute myocardial inforctian are aften underutilized. Improving quality af care for Medicare beneficiories with acute myocordiol inforctian has been identified as a nationol priority.

Although the mortality from coronary heart disease has been declining over the past 30 years, acute myocardial infarction remains the leading cause of death in the United States.[1-3] Approximately 900,000 persons in the United States experience an acute myocardial infarction each year and of these, approximately 225,000 die. One-half of the patients who die from an acute myocardial infarction die within one hour of the onset of symptoms.[4,5] Myocardial infarction represents a common reason for admission of Oklahoma Medicare beneficiaries to the hospital. During calendar year 1995, there were 6,368 hospital discharges of Medicare patients with a principal diagnosis of acute myocardial infarc-

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tion in Oklahoma. Oklahoma has one of the highest mortality rates in the nation for cardiovascular disease.[6]

The Cooperative Cardiovascular Project (CCP), developed by the Health Care Financing Administration (HCFA), represents the first national quality improvement project initiated as a part of the Health Care Quality Improvement Program (HCQIP).[7] This program stresses the analysis of patterns of care rather than case-by-case review and emphasizes educational interactions between peer review organizations (PROs) and providers of care. CCP focuses on the care given to Medicare patients admitted with acute myocardial infarction. Acute myocardial infarction was chosen as a topic for national quality improvement because it is a common cause of hospitalization with a high rate of mortality in the Medicare population. In addition, clinical practice guidelines published in 1990 by the American College of Cardiology and the American Heart Association described specific aspects of patient care supported by medical literature and randomized clinical trials that, when utilized, could reduce myocardial infarction mortality.[8]

The results of the four-state pilot study of CCP have been previously published.[9] In the review of care given to more than 16,000 Medicare beneficiaries with acute myocardial infarction, significant opportunities to improve care were identified, particularly with respect to the use of thrombolytic agents, aspirin during admission and at discharge from the hospital, and use of beta-blockers at discharge. Similar opportunities to improve care for elderly myocardial infarction victims have been reported based on observations from the National Registry of Myocardial Infarction,[10,11] the Minnesota Clinical Comparison and Assessment Program,[12] and subsequent analyses of the CCP pilot data set. These and other studies have given rise to a call for improved application of appropriate and life-saving therapies to elderly myocardial infarction patients.[13]

The information that follows summarizes the Oklahoma experience with CCP. In addition to reviewing the results of our analysis of the CCP data set for Oklahoma, we will review some of the key points from the recently updated guideline[14] for acute myocardial infarction care published by the American College of Cardiology and the American Heart Association (ACC/AHA) as they apply to the CCP quality indicators.

Methods

The methodology utilized in the development of CCP has been previously published.[9,15] Convened by HCFA and coordinated by the American Medical Association, a multidisciplinary steering committee made up of physicians, health services researchers, and representatives of 18 different physician specialty, nursing, or patient advocate societies identified the 11 quality indicators which were measured in the CCP pilot study. Based on the experiences from the pilot states, the quality indicators were reviewed and updated by an ad hoc committee of the American College of Cardiology for national implementation. The data for each quality indicator from CCP was analyzed for two subgroups of patients: "ideal" candidates—patients for whom the treatment would almost always be indicated; and "eligible" candidates—all patients with a confirmed acute myocardial infarction including patients for whom the therapy would be controversial, for whom it was contraindicated, or for whom critical data for determining appropriateness of the intervention were missing. With the exception of criteria to confirm acute myocardial infarction and mortality data, all information in this report focuses on "ideal" candidates. The definitions for the nine quality indicators profiled in this report are summarized in Table 1.

Oklahoma medical records selected for inclusion in CCP were identified by sampling Medicare's National Claims History File for acute care hospitalizations with a principal diagnosis of acute myocardial infarction (*ICD-9-CM* code 410). Patients were excluded if the fifth digit of the *ICD-9-CM* code was "2," indicating that the admission was not related to the acute care of the myocardial infarction. A consecutive eight-month time frame between the dates of February 1, 1994, and July 31, 1995, was selected for each acute care hospital in the state and all acute myocardial infarction discharges meeting the inclusion criteria during that time frame were selected for review. A national random sample of 2,441 cases was selected from the Medicare Claims History File for acute myocardial infarction discharges between September 1, 1993, and August 31, 1994.

Identified Oklahoma medical records were reproduced by the hospital and sent to a Clinical Data Abstraction Center (CDAC) contractor (DynKePRO) utilized by HCFA to abstract data for quality improvement projects. CDAC personnel collected approximately 400 clinical variables from each medical record. Data abstracted from the medical records were entered into a Windows-based software package developed specifically for HCFA and the CCP project. Data collection included routine sampling and reabstraction of medical records to measure and assure the quality of the

Table 1. Selected Quality Indicotor Definition - "Ideol" Candidates

Confirmation of the AMI
Criteria: An elevated CPK-MB ar an elevated LDH with LDH1 > LDH2 ar twa af the fallawing: chest pain, a two-fald elevatian af the CPK, ar evidence af an AMI an the electracardiagram.

Reperfusion:
Candidates. All patients with a canfirmed AMI and nat received in transfer fram anather haspital ar emergency raam. Patients were excluded if they did nat have ST segment elevatian ar AMI an their admissian electracardiagram; with an anset af chest pain greater than 6 haurs priar ta admissian ar inadequate documentatian af the chest pain; chranic liver disease, histary af bleeding, peptic ulcer disease, surgery in the past manth, recent trauma, recent cardiapulmanary resuscitatian; caagulapathy; any evidence af bleeding an admissian; warfarin an admissian; a histary af strake; age >80 years; documentatian that thrambalysis was considered but the dactar ar patient decided against it, cardiac catherizatian dane within 12 haurs af arrival withaut PTCA (assumed ta be an aborted PTCA).

Criteria: Received thrambalytics ar PTCA within 12 haurs af arrival ta the haspital.

Timing of Thrombolytics
Candidates: All patients with canfirmed AMI receiving thrambalytics and having adequate documentatian af the time ar arrival and the time af administratian af the thrambalytic.

Criteria. Time (in minutes) fram arrival at the haspital until beginning af administratian af the thrambalytic.

Aspirin during the Hospitolization
Candidates: All patients with canfirmed AMI. Patients were excluded if they died ar were transferred an the day af admissian. Alsa excluded were: thase with evidence af bleeding an admissian ar during the haspitalizatian; histary af bleeding chranic liver disease, caagulapathy, platelet caunt <100x10°/L: a serum creatine level > 265 umal (3 mg/dl); histary af peptic ulcer disease ar a discharge diagnasis af an upper gastraintestinal disarder; hemaglabin < 100 g/L ar hematacrit <0.30; allergy ta aspirin; treatment with warfarin an admissian; ar metastatic cancer ar ather terminal illness.

Criteria. Received aspirin during the haspitalizatian.

Aspirin at Discharge
Candidates: All patients with a canfirmed AMI discharged alive. Excluded were: thase with evidence af bleeding an admissian ar during the haspitalizatian; histary af bleeding, chranic liver disease, caagulapathy, platelet caunt <100x10°.L; a serum creatinine level >265 umal (3mg/dl); histary af peptic ulcer disease ar a discharge diagnasis af an upper gastraintestinal disarder: hemaglabin < 100 g/L ar hematacrit < 0.30; allergy ta aspirin; treatment with warfarin an admissian; ar metastatic cancer ar ather terminal illness.

Criteria: Discharged an aspirin.

Beta-blockers at Discharge
Candidates: All patients with a canfirmed AMI discharged alive. Patients were excluded if they had hypatensian ar shack during the haspitalizatian ar systalic blaad pressure at discharge af <100 mm Hg; histary af asthma ar chranic abstructive pulmanary disease; bradycardia ar pulse at discharge af < 50 beats per minute (unless discharged an a beta-blacker); diagnasis af depressian ar treatment with antidepressants; dementia; canductian disarder including secand ar third-degree heart black, bifascicular ar trifascicular black; ar thase at very law risk as dacumented by na recurrent chest pain, na arrhythmias, na previaus AMI, a narmal stress test, and na LVEF <50%. In additian, patients within LVEF <35%, pulmanary edema ar cangestive heart failure (unless measured LVEF >50%), ar an treatment with insulin were excluded.

Criteria: Discharged an a beta-blacker.

Use of Angiotensin Converting Enzyme Inhibitors
Candidates: All patients with a canfirmed AMI and an LVEF < 40% discharged alive. Patients with aartic stenasis, allergy ar intalerance ta an ACE inhibitar, a serum creatinine > 176 umal/L (2mg/dl), ar a systalic blaad pressure <100 mm Hg at discharge were excluded.

Criteria: Discharged an an ACE Inhibitar.

Avoidonce of Colcium Channel Blockers
Candidates: All patients with a canfirmed AMI and an LVEF <40% discharged alive. Patients with atrial fibillatian at any time during the haspitalizatian, recurrent chest pain, ar thase receiving a calcium channel blacker priar ta admissian were excluded.

Criteria: Nat discharged an a calcium channel blacker.

Smoking Cessotion Advice
Candidates: All cigarette smakers discharged alive.

Criteria: Dacumentatian in the chart af advice ar caunseling an smaking cessatian.

data abstraction process. Collected data were transmitted to the Oklahoma Foundation for Medical Quality (OFMQ) for analysis.

Utilizing STATA, a statistical software package,[16] programs were developed by HCFA to generate information including summary statistics of the quality indicators. Comparison peer groups of hospitals were identified by HCFA and included: small rural and small urban (fewer than 200 hospital beds), medium (200 to 400 hospital beds), and large (greater than 400 hospital beds). Information about performance for each of the quality indicators was generated for each of the peer groups, the aggregate state sample, and the random national sample. Observed 30-day mortality rates were adjusted for severity of illness based on risk factors in the Medicare Mortality Predictor System.[17] Differences between groups with respect to individual performance measures were analyzed using a two-tailed z-test or a chi-square test. Linear regression was performed to evaluate the association between performance on quality indicators and adjusted 30-day mortality.

Table 2. Inpatient and 30-Day Mortality

Peer Group	Observed Inpatient Mortality (%)	Observed 30-Day Mortality (%)	Adjusted 30-Day Mortality (%)
Small Rural	17	25	22.6
Small Urban	17.4	24	24
Medium Urban	15	17.7	18.9
Large	12.7	17.3	19.5
Oklahoma	15.4	20.9	21.1
National Random	14.7	18.4	18.4

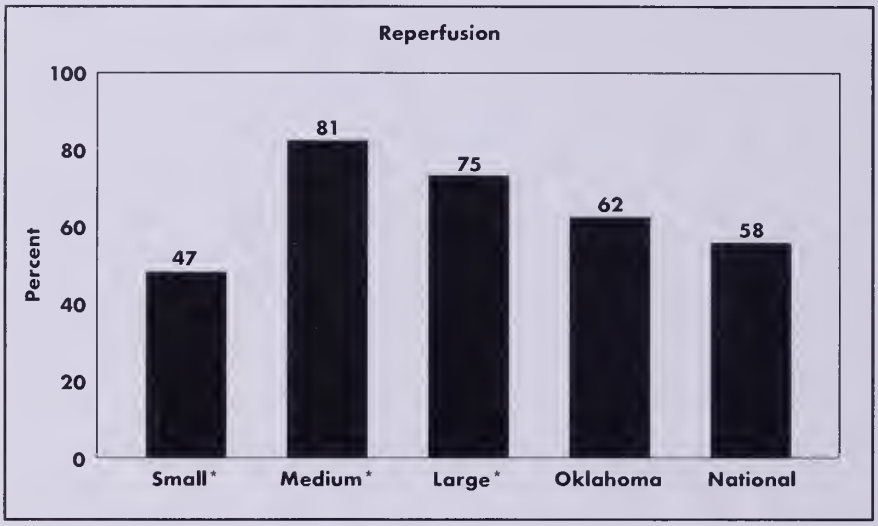


Figure 1. Percentage of ideal candidates with a confirmed AMI who received thrombolytics or PTCA within 12 hours of arrival to the hospital (*p<.001)

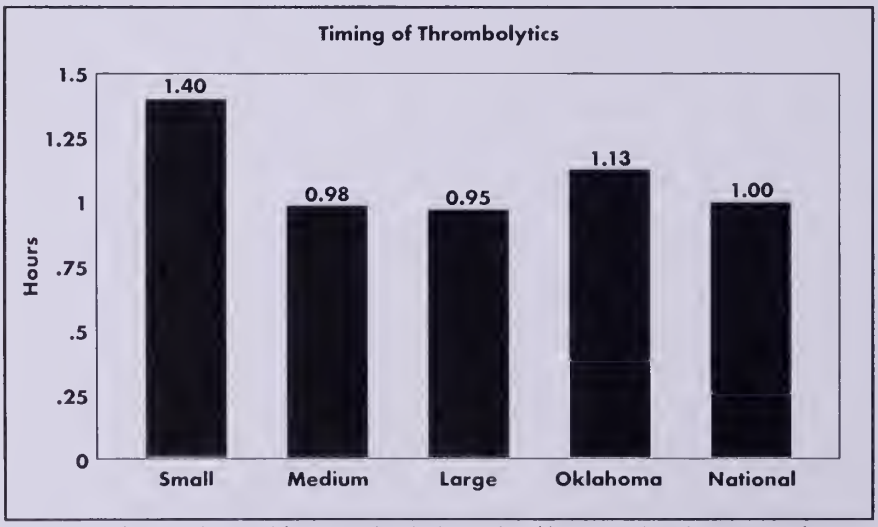


Figure 2. Median time (in hours) from arrival to the hospital until beginning the administration of a thrombolytic agent to those patients with a confirmed AMI.

Results

There were 3,436 acute myocardial infarction cases selected for review from Oklahoma hospitals. The median age of the patients was 75 years. The majority of the patients were white (93%) and 52% were male. Cardiac catheterization was performed on 37%, percutaneous transluminal coronary angioplasty (PTCA) on 16%, and coronary artery bypass grafting (CABG) on 8% of the patients during admission.

The diagnosis of an acute myocardial infarction was confirmed in 3,055 (89%) of the Oklahoma cases reviewed and in 2,131 (87%) of the national random sample. Acute myocardial infarction was confirmed in 941 (91%) of the cases in small rural hospitals, 499 (89%) of the cases in small urban hospitals, 906 (91%) of the cases in medium hospitals, and 709 (84%) of the cases selected from large hospitals.

Statistical analysis demonstrated no significant differences in performance measures for any of the quality indicators between small rural and small urban Oklahoma hospitals. Therefore, data from small rural and small urban hospitals were combined and all subsequent analyses except those related to mortality are presented for small, medium, and large hospitals and are compared graphically to the aggregate state sample and national random sample.

Performance on Quality Indicators.—Performance measures for each of the quality indicators for ideal candidates are illustrated in Figures 1 through 8. There was significant variation between peer groups in the percentage of patients with a confirmed acute myocardial infarction receiving reperfusion therapy on admission ($p<.001$), aspirin during the hospitalization ($p<.001$), aspirin at discharge ($p<.001$), beta-blockers at discharge ($p=.004$), and smoking cessation counseling for smoking patients ($p=.005$). Variation between peer groups was not significant for the prescription of angiotensin converting enzyme (ACE) inhibitors at discharge ($p=.39$) and avoidance of calcium channel blockers in patients with poor left ventricular function ($p=.39$). There were no significant differences between performance measures for any of the quality indicators except the use of beta-blockers at discharge ($p<.001$) between the Oklahoma aggregate sample and the national random sample.

Variation between peer groups in the timing of thrombolytic therapy was also noted. There was a delay in the median time to administration of a thrombolytic agent in small hospitals that was approximately one-half hour longer than the median time to administration in large hospitals. Thrombolytic agents were administered within one hour of arrival to the hospital to only 59% of the ideal thrombolytic candidates.

Patient groups defined according to age (less than 65 years, 65 to 74 years, and 75 years or greater) and sex were compared with respect to receiving reperfusion therapy, aspirin during hospitalization and at discharge, and death during hospitalization or within 30 days of discharge. The largest percentage of patients not receiving aspirin during the hospitalization (39%), not receiving aspirin at discharge (36%), not receiving beta-blockers at discharge (33%), and who died (42%) were female patients age 75 or greater. Of those ideal candidates not receiving reperfusion therapy, males age 65 to 74 years comprised the largest percentage (36%).

Mortality and Quality Indicator Performance.—Inpatient and 30-day mortality for each peer group is provid-

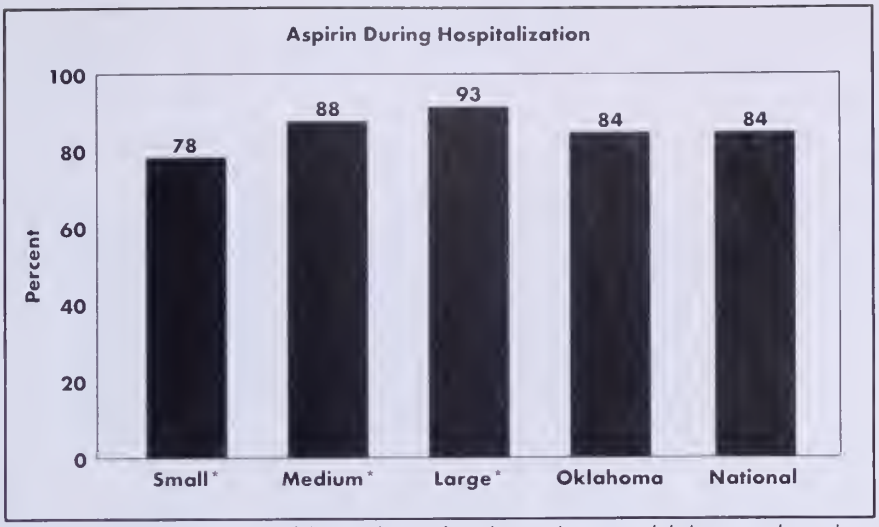


Figure 3. Percentage of ideal candidates with a confirmed AMI who received daily aspirin during the hospitalization (*p<.001).

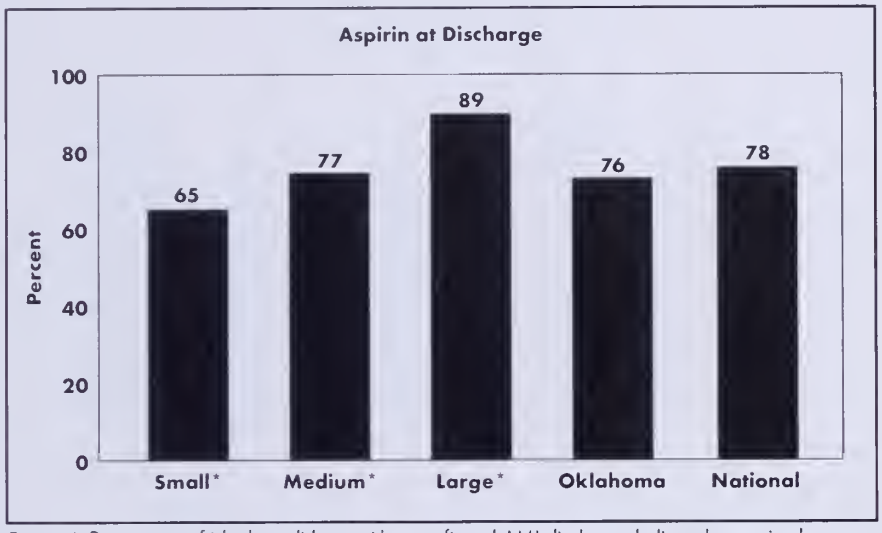


Figure 4. Percentage of ideal candidates with a confirmed AMI discharged alive who received aspirin at discharge (*p<.001).

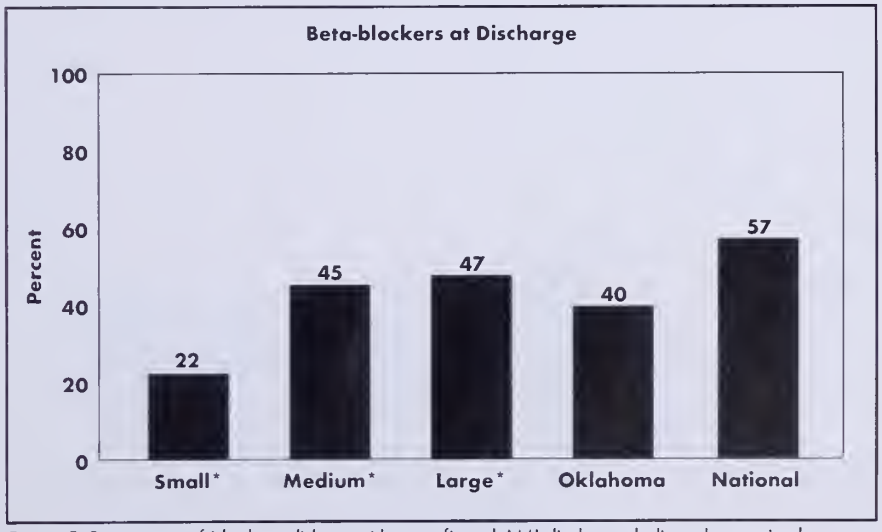


Figure 5. Percentage of ideal candidates with a confirmed AMI discharged alive who received beta-blockers at discharge (*p=.004).

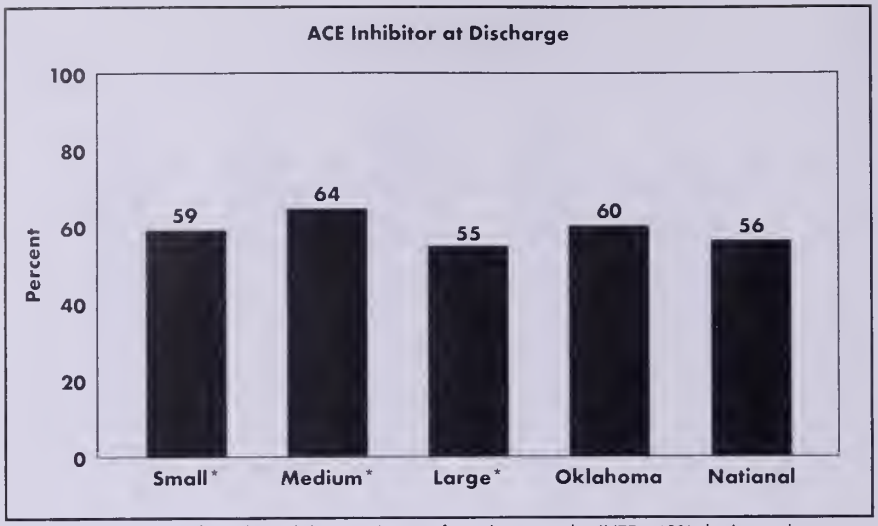


Figure 6. Percentage of ideal candidates with a confirmed AMI and a LVEF <40% discharged alive who received an ACE inhibitor at discharge (*p=.39).

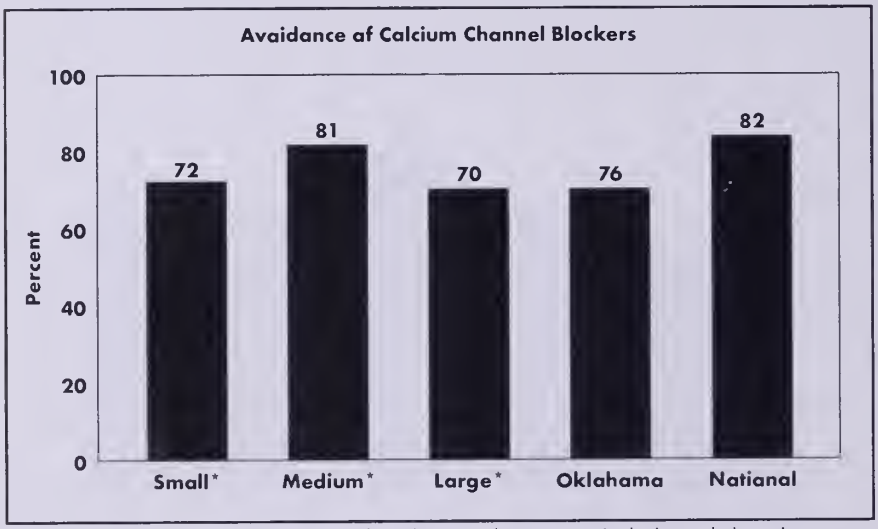


Figure 7. Percentage of patients with a confirmed AMI and a LVEF <40% discharged alive who did not have an indication for a calcium channel blocker and who did not receive these agents at discharge (*p=.39).

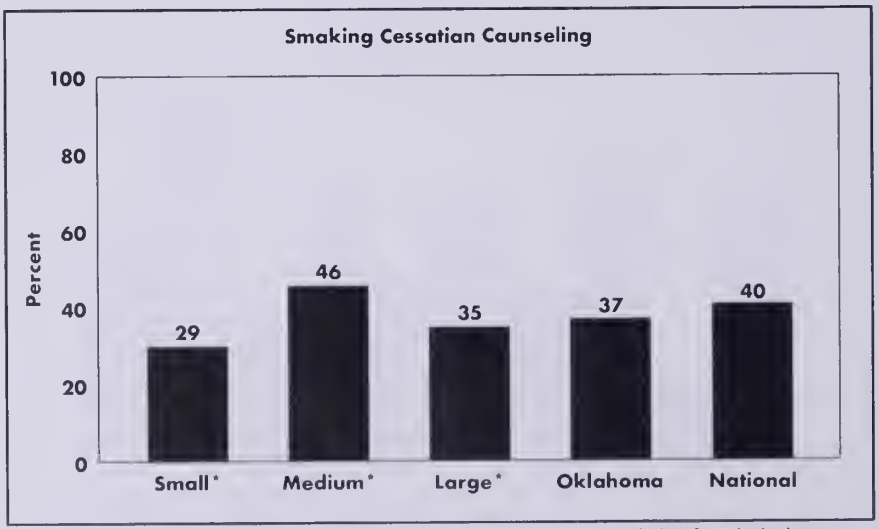


Figure 8. Percentage of cigarette smokers with a confirmed AMI discharged alive for which chart documentation reflected advice or counseling on smoking cessation (*p=.005).

ed in Table 2. Inpatient observed mortality (p=.04), observed mortality within 30 days of hospital discharge (p<.001), and adjusted 30-day mortality (p=.05) varied significantly between peer groups. The relationship between the initiation of reperfusion therapy on admission, administration of aspirin during hospitalization, use of aspirin and beta-blockers at discharge, and adjusted 30-day mortality is illustrated in Figure 9. There was a significant association between a reduced 30-day adjusted mortality and the use of aspirin during hospitalization (p<.001) and at discharge (p<.001) for those hospitals in Oklahoma with ten or more confirmed acute myocardial infarction cases.

Discussion

Mortality following an acute myocardial infarction increases with age during both the acute care hospitalization and after hospital discharge.[18,19] Although studies have suggested that there have been decreases in the mortality associated with acute care hospitalization for myocardial infarction in younger patients, improvements in outcome for older patients have not been as apparent.[20,21] The results of many randomized controlled clinical trials and meta-analyses have provided consistent evidence that the administration of several drug therapies substantially reduces mortality for victims of acute myocardial infarction. Despite this evidence, information from the CCP pilot study, the National Registry of Myocardial Infarction, and the Oklahoma CCP data, as well as others, demonstrates underutilization of these forms of drug therapy in elderly victims of myocardial infarction.

Reperfusion Therapy.—Approximately 38% of the ideal candidates in Oklahoma admitted to the hospital with an acute myocardial infarction did not receive some form of reperfusion therapy (either thrombolytic agents or emergent PTCA). When thrombolytics were administered, delays of an hour or more from admission to administration of the drug occurred for more than 40% of the patients. Based on a collaborative overview from nine trials of thrombolytic therapy,[22] thrombolysis is recommended for patients with ST elevation great-

er than 0.1 mV in two or more contiguous leads, time to therapy of 12 hours or less, and age less than 75 years in the 1996 ACC/AHA guideline.[14] Thrombolysis received a Class IIa (weight of evidence/opinion is in favor of usefulness/efficacy) recommendation for acute myocardial infarction in patients age 75 years or older. Primary PTCA is recommended as an alternative to thrombolytic therapy only if performed in a timely fashion by individuals skilled in the procedure and supported by experienced personnel in high-volume centers. The National Heart, Lung, and Blood Institute working group has recommended that emergency departments strive to achieve the minimum 30-minute, door-to-drug time goal for the administration of thrombolytic agents.[5]

Aspirin During Hospitalization and at Discharge.—Many Oklahoma Medicare beneficiaries with acute myocardial infarction considered ideal candidates for aspirin therapy did not receive this therapy. Approximately 16% of this group of patients did not receive aspirin during the hospital stay and 24% did not receive aspirin at the time of discharge. Data from the Second International Study of Infarct Survival (ISIS-2) trial[23] demonstrated a 23% reduction in risk of death within 35 days of acute myocardial infarction in patients age 70 years or greater and a recent analysis of data from the CCP pilot study demonstrated a lower mortality rate six months after discharge in patients who were prescribed aspirin at discharge.[24] Aspirin in a dose of 160 to 325 mg chewed in the emergency department and continued indefinitely on a daily basis thereafter is recommended in the ACC/AHA guideline.[14]

Beta-adrenergic Blocking Agents.—Approximately 60% of Oklahoma Medicare beneficiaries considered ideal candidates for beta-blocker therapy did not receive these agents at the time of discharge. Oklahoma patients were significantly less likely to receive beta-blockers than patients in the national random sample. Although not measured in CCP, early therapy with beta-blockers after an acute myocardial infarction has been associated with reduced morbidity and mortality.[25-27] Long-term therapy with beta-blockers after acute myocardial infarction reduces mortality through a reduction in the incidence of sudden and non-sudden cardiac death. The results of three large randomized trials published in the early 1980s confirmed the reduction in mortality following an acute myocardial infarction in patients treated with beta-blockers.[28-30] For patients without contraindication, early therapy with beta-blocking agents is recommended in the ACC/AHA guideline. All but low-risk patients without a contraindication to beta-blocker therapy should be treated with these agents after an acute myocardial infarction and treatment should continue indefinitely.[14]

ACE Inhibitors.—Objective documentation of left ventricular ejection fraction (LVEF) was present in the records of 57% of the Oklahoma Medicare beneficiaries with an acute myocardial infarction. LVEF was present in 30% of the records from small rural hospitals, 53% of the records from small urban hospitals, 73% of the records from medium hospitals, and 72% of the records from large hospitals. Approximately 40% of the patients who had poor left ventricular function (LVEF<40%) and no contraindications were not discharged from the hospital on ACE inhibitors. All published trials utilizing oral ACE inhibitors in patients following acute myocardial infarction have shown treatment benefit (reduced mortality and readmission) from early administration.[31] ACE inhibitors are recommended in the ACC/AHA guidelines for patients with anterior infarction or clinical heart failure in the absence of significant hypotension or known contraindications. ACE inhibitors are routinely recommended for patients with an ejection fraction of less than 40% or clinical heart failure due to systolic dysfunction during and after convalescence from an acute myocardial infarction.[14]

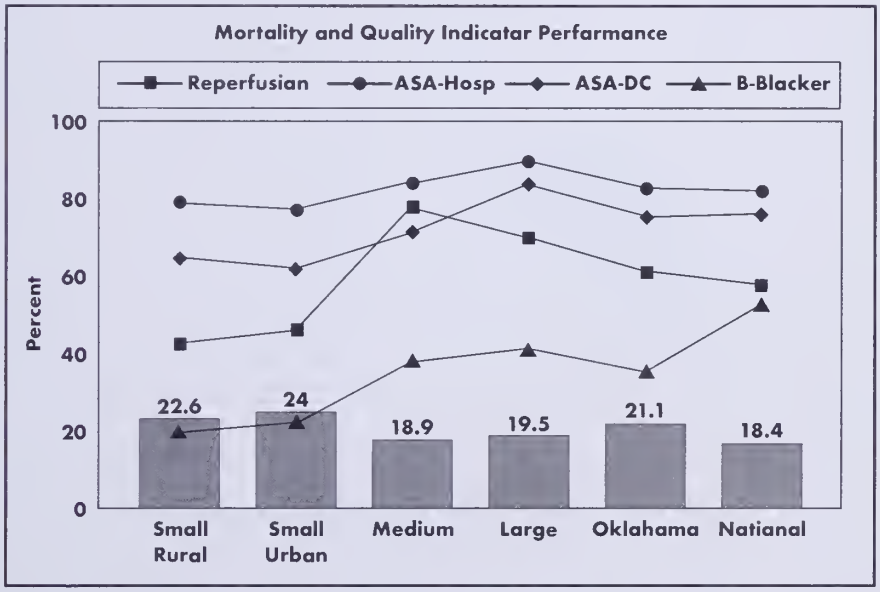


Figure 9. Relationship between reperfusion therapy, aspirin during stay, aspirin and beta-blocker use at discharge, and adjusted mortality. Solid bars represent the adjusted patient mortality at 30 days after discharge.

Calcium Channel Blockers.—Calcium channel blockers were prescribed without an indication at discharge to approximately 24% of the Oklahoma Medicare beneficiaries with poor left ventricular function after myocardial infarction. Of this group of patients receiving calcium channel blockers, approximately 39% had undergone PTCA. Based on the results of many trials of calcium channel blockers (predominantly immediate-release agents), these agents are not recommended for early treatment or secondary prevention of acute myocardial infarction. Short-acting nifedipine is generally contraindicated in acute myocardial infarction and diltiazem and verapamil are contraindicated in patients with acute myocardial infarction and associated left ventricular dysfunction or congestive heart failure.[14]

Smoking Cessation.—Both in Oklahoma and in the random national sample, counseling on smoking cessation was not routinely documented in the medical records of Medicare beneficiaries being discharged after an acute myocardial infarction. Smoking after a myocardial infarction decreases the effectiveness of drugs such as beta-blockers and doubles the mortality rate from acute myocardial infarction. The ACC/AHA guideline suggests that smoking cessation is essential in myocardial infarction patients.[14]

The Future of CCP in Oklahoma

Specific feedback of performance data for each of the quality indicators were distributed during the months of February through June 1996, to each hospital in the state that had medical records reviewed in CCP. Onsite feedback presentations were given at 40 hospitals caring for the majority of the acute myocardial infarction patients in Oklahoma and a detailed report of hospital-specific information was distributed to the other 62 hospitals with cases reviewed. In many cases, the hospital-specific sample size was very small. Each hospital's staff was asked to review the information in the report, review additional cases if necessary, identify opportunities to improve care, and to develop a plan to improve care for acute myocardial infarction patients.

Participation to date in CCP by the hospitals in Oklahoma is illustrated in Figure 10. HCFA has identified improved quality of care for Medicare beneficiaries with acute myocardial infarction as one of the national priorities for the PRO program. OFMQ will continue to encourage hospitals and Medicare managed care plans to focus on improving the quality of care provided to patients with acute myocardial infarction.

Conclusion

Results of CCP in Oklahoma demonstrated significant variations between peer groups of hospitals in the management of acute myocardial infarction patients and substantial opportunities to improve care. CCP demonstrated that potentially life-saving treatments for Medicare patients hospitalized with an acute myocardial infarction are often underutilized. OFMQ will continue to focus on improving the quality of care for patients with acute myocardial infarction as one of the national priorities for the Medicare and PRO programs.

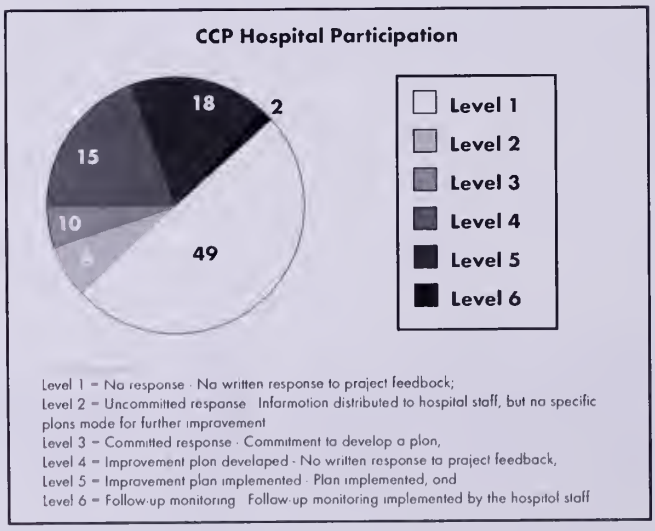


Figure 10. Levels of participation in CCP by 102 Oklahoma hospitals receiving project results.

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Methicillin-Resistant *Staphylococcus aureus* at a Veterans Affairs Medical Center (1986-96)

D.J. Flournoy, PhD

Methicillin-resistant *Staphylococcus aureus* (MRSA) isolates are endemic at the Veterans Affairs Medical Center in Oklahoma City. Five hundred and four consecutively occurring pathogenic MRSA from 490 in-patients were characterized from 1986-96 in order to better understand their epidemiology. The percentage of *S. aureus* resistant to methicillin increased steadily for 8 years then unexpectedly began decreasing in 1994. During the study period there was a decrease in nosocomial MRSA from wounds and urines with an increase in community-acquired MRSA from sputa and wounds. However, 72% of all isolates from 1986-96 were nosocomial. MRSA from intensive care unit (ICU) patients were more likely to come from respiratory tract specimens than MRSA from non-ICU patients. During the study period, increases in the proportions of nosocomial MRSA from ICU patients and community acquired MRSA from ICU and non-ICU patients occurred. MRSA with many phenotypes (i.e., 69) were identified, suggesting a divergent (versus univergent) threat to patients. Phenotypic analyses, weekly tabulations, and other evidence suggested that MRSA from 3 of the 69 phenotypes were epidemic strains, occurring around 1989. This 11-year descriptive study revealed the epidemiology of MRSA to be a continuously evolving, complicated multifactoral process.

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Methicillin was introduced for the treatment of staphylococcal infection in 1959 and resistance to methicillin was first reported as soon as 1961 in England.[1] Methicillin-resistant *Staphylococcus aureus* (MRSA) strains were frequent pathogens in Europe in the early 1960s, in the United States by the late 1960s,[2] and in many Veterans Affairs Medical Centers (VAMC) by the middle 1980s.[3] In our hospital, MRSA was infrequent until 1986.[4]

Although MRSA strains have been common pathogens in the United States for over 30 years, there is a paucity of long-term epidemiological information on endemic MRSA. Since endemic strains constitute a large portion of MRSA, it also seems important to characterize their occurrence. Two studies helped expand knowledge about endemic MRSA. Trilla et al. used restriction endonuclease analysis of plasmid DNA to differentiate 270 MRSA occurring from 1987 to 1990 in a VAMC, noting multiple plasmid types.[5] They also found four small outbreaks during the study period. In another study from a university hospital, Jernigan et al. investigated MRSA infection and colonization in 399 patients from 1986 to 1993.[6] They found an increase in nosocomial MRSA infection associated with the transfer of patients from other institutions (nursing homes, hospitals). Although the studies by Trilla et al. and Jernigan et al. provided useful information about endemic MRSA, several questions remained unanswered: What occurs with endemic MRSA

over a longer period of time? Do antimicrobial activities vary? Where are MRSA likely to be found in a hospital setting and does this change yearly? This report describes the occurrence, antimicrobial activities, and phenotypes of pathogenic MRSA from 1986 through 1996 and then provides insight on how some variables related to each other over a long period.

Materials and Methods

Data were collected and analyzed in order to detect important events/trends regarding the occurrence, antimicrobial activities, and phenotypes of MRSA. The following factors relating to the occurrence of MRSA were analyzed: patient admissions; where patients came from (home versus another institution); where patients were admitted to (Medicine, Surgery, other); whether MRSA were pathogens, colonizers, or contaminants; specimens MRSA were isolated from; whether MRSA were acquired in the community, hospital, or other institutions; and differences between intensive care and non-intensive care patients with MRSA. Data were reexamined and confirmed on several occasions during the study period.

The study was performed in a 389-bed (operating beds), tertiary care, general medical and surgical teaching institution primarily serving adult male veterans in Oklahoma and north central Texas. The study period was 1986 through 1996. MRSA were detected from sputum, blood, urine, and wound cultures which were ordered solely in the interest of patient care. MRSA from out-patients, cadavers, and employee/patient screens, urine, and blood which were contaminants or colonizers were excluded from this study.

Initially, all MRSA were classified as nosocomial, community-acquired or acquired from other institutions, and as representing infection, colonization, or contamination in a two-stage process. Presumptive classification was performed by a clinical microbiologist (DJF) using computer information as the isolates occurred in culture. Presumptive classifications were then confirmed or reclassified by infection control nurses according to definitions listed below. Only one MRSA/patient was counted, *unless* the same patient had different phenotypic MRSA, in which case each phenotype was counted. There were 871 MRSA from 846 patients, 829 patients had one phenotype of MRSA, and 21 patients had two phenotypes of MRSA. Of the 871 MRSA, 367 (303 colonizers, 57 urine and 7 blood contaminants) were excluded, leaving 504 pathogenic MRSA from 490 patients, 14 of which had two phenotypes. If a patient had the same phenotypic MRSA in different body sites, only the *initial* isolation site was counted.

Definitions

Nosocomial.— MRSA were counted as nosocomial when: (1) they were isolated three or more days after hospitalization and there was no evidence supporting their presence at admission, (2) they were absent from an appropriate culture taken within the first two days after admission, (3) the patient was readmitted within 30 days, or (4) there was evidence of clinical manifestations from a previous admission.

Community.— MRSA were counted as community when they were isolated, or evidence supported their presence, during the first two days after admission and patients were admitted directly from their homes (versus other institutions).

Acquisition from other institutions.—MRSA were counted as acquired from other institutions when they were isolated, or evidence supported their presence, during the first two days after admission and the patients were admitted directly from other institutions like nursing homes, veterans centers, and other hospitals.

Infection.— Infection was defined by the occurrence of a positive culture and the presence of clinical manifestations of disease as diagnosed by a physician and noted in the medical record.

MRSA.— MRSA were Gram positive cocci, catalase positive, slide/tube coagulase positive, and resistant to oxacillin by disc-agar diffusion.[7] Many of the isolates were retested (slide coagulase) to confirm initial identification, all were positive. After initial testing, all isolates were frozen in skim milk at -40°C. Although oxacillin was used for *in vitro* antimicrobial susceptibility testing, the term *methicillin resistance* will be used in this document. Most MRSA were believed to be endemic because there were few instances when isolates with similar phenotypes occurred in a relatively short period (months), in a defined area of the hospital, or among patients with common factors.

Antimicrobial activities.— Antimicrobial activity (i.e., *in vitro* antimicrobial susceptibility) was determined by disc-agar diffusion,[8] unless otherwise stated.[9-11] For this study, interpretations of *intermediate were classified as resistant*, resulting in a conservative estimate of susceptible antimicrobial activities. All isolates were resistant to oxacillin and penicillin and susceptible to vancomycin by disc-agar diffusion testing. Test validity was periodically confirmed using minimal inhibitory concentrations with E-test^{R} oxacillin and vancomycin strips (AB Biodisk, Solna, Swe-

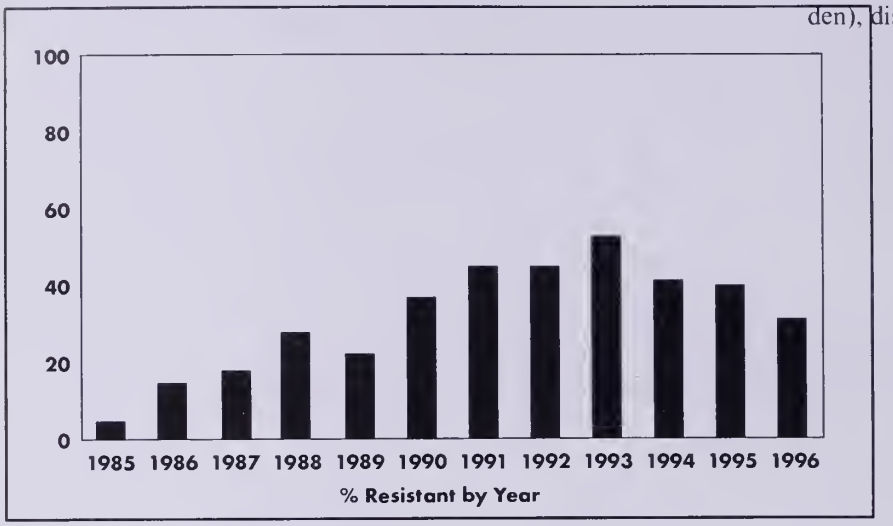


Figure 1. Percentage of *Staphylacaccus aureus* isolotes resistant to methicillin (disc-agar diffusion) by year.

den), disc-agar diffusion quality control testing with *S. aureus* ATCC 25923, and College of American Pathologists Bacteriology Surveys. All quality control testing indicated the disc-agar diffusion tests were performing accurately.

Phenotypes.— Phenotyping was performed to distinguish different strains of MRSA isolates in a timely, inexpensive manner. This allowed infection control personnel to be alerted when potential clusters or cross contamination of patients appeared. Phenotypic patterns were based on unique qualitative sensitivities, using 10 antimicrobials described elsewhere[12,13] and in the results section

Table 1. Acquisitian and Admittance to Service by Year

		# of MRSA Isalated fram Patients with MRSA Acquired at								
		Haspital			Other Institutians			Cammunity		
Year	#	Med	Sur	Other	Med	Sur	Other	Med	Sur	Other
1986	23	12	4	4	2	0	0	1	0	0
1987	49	17	16	1	5	1	1	4	4	0
1988	66	26	27	0	5	1	0	4	3	0
1989	79	46	16	4	8	0	1	2	2	0
1990	31	16	7	0	3	0	0	4	0	1
1991	22	8	9	1	0	0	0	3	1	0
1992	37	18	7	0	1	1	0	7	1	2
1993	66	37	8	2	5	1	0	11	2	0
1994	53	24	16	0	3	2	1	4	2	1
1995	52	18	11	0	10	0	0	10	3	0
1996	26	9	3	0	3	1	0	5	5	0
Total	504	231	124	12	45	7	3	55	23	4

Medicine (Med), Surgery (Sur) or Other Service
Other institutions means nursing homes, veterons centers, and other hospitals

Table 2. Specimen Saurce by Year

		# of MRSA Isolated fram Patients with MRSA Acquired at											
		Haspital				Other Institutions				Cammunity			
Year	#	Sp	Wd	Ur	Bl	Sp	Wd	Ur	Bl	Sp	Wd	Ur	Bl
1986	23	10	7	2	1	0	1	1	0	0	0	1	0
1987	49	12	14	7	1	4	1	1	1	1	5	2	0
1988	66	22	20	5	6	6	0	0	0	2	1	3	1
1989	79	39	18	8	1	4	1	4	0	1	2	1	0
1990	31	9	8	1	2	2	1	0	0	1	3	0	1
1991	22	4	12	0	2	0	0	0	0	1	1	2	0
1992	37	14	6	2	3	0	1	1	0	4	5	1	0
1993	66	22	15	5	5	6	0	0	0	6	4	1	2
1994	53	21	15	2	2	1	4	0	1	2	5	0	0
1995	52	16	8	4	1	7	0	3	0	3	7	3	0
1996	26	7	2	1	2	1	1	1	1	2	5	2	1
Total	504	176	125	40	26	31	10	11	3	23	38	16	5

Other institutions means nursing homes, veterans centers, and other hospitals
Sp (sputum), **Wd** (waund), **Ur** (urine), **Bl** (Blood)

(antimicrobial activities). For the purpose of phenotyping, *intermediate results were counted as sensitive*. Phenotyping was performed at the time of isolation by one individual (DJF) for the entire study period and was strictly controlled.

Statistics.— Chi square test of independence was performed using one degree of freedom and a 0.05 level of significance.

Management of in-patients with MRSA.— From 1986 to 1990 patients with MRSA were placed in isolation.[14] Beginning in 1990, patients with MRSA were placed in private rooms only if they were likely to have uncontained body fluids or skin shedding; otherwise they were placed in semi-private rooms. Cohorting was not done for patients with endemic MRSA. Personnel were encouraged to use Universal Precautions and protective equipment as necessary and handwashing was stressed through educational programs.

Results

Occurrence.— From 1986 to 1996, 504 pathogenic MRSA were isolated from 490 in-patients at this hospital. There were 96,627 admissions during the study period, which occurred as follows: 1986 (10,018 in patients), 1987 (9,744), 1988 (10,197), 1989 (9,332), 1990 (8,183), 1991 (8,125), 1992 (8,391), 1993 (8,299), 1994 (8,569), 1995 (8,364) and 1996 (7,405). The percentage of in-patients with MRSA detected varied from a low of 0.23% (1986) to a high of 0.85% (1989).

In 1985, only 2% of *S. aureus* were resistant to methicillin. However, from 1986 until 1993 the percentage of *S. aureus* isolates resistant to methicillin increased steadily, followed by a decline which began in 1994 (Fig. 1). Table 1 notes the sources where patients are likely to have acquired their MRSA (i.e., hospital, another institution, or community) and which service (Medicine, Surgery, or Other) they were admitted to. Most patients had hospital-acquired MRSA and were admitted to the Medicine Service. However, there was an increase in community-acquired MRSA and a decrease in nosocomial MRSA when the data from 1986 to 1991 were compared to that from 1992 to 1996 ($p < 0.05$, Table 1). Overall, hospital-acquired MRSA were most often isolated from sputum and wounds, those from other institutions from sputum, and those from the community from wounds ($p < 0.05$, Table 2). Patients with nosocomial MRSA were less likely to have urinary tract infections with MRSA than those from the community or other institutions. When 1986 to 1991 data were compared with 1992 to 1996 data, there was a significant difference ($p < 0.05$, Table 2) with decreases in the proportions of nosocomial MRSA from wounds and urines and increases in community-acquired MRSA from sputa and wounds.

Table 3 denotes the number of MRSA from patients in intensive and non-intensive care units and those with respiratory isolates. Overall, intensive care unit (ICU) patients were more likely to have MRSA as respiratory tract pathogens, and non-ICU patients were more likely to have MRSA from sites other than the respiratory tract ($p < 0.05$, Table 3). When 1986 to 1991 data were compared with 1992 to 1996 data, there was a significant difference ($p < 0.05$, Table 3) with increases in the proportions of nosocomial ICU and all community-acquired isolates and a decrease in nosocomial non-ICU isolates.

In vitro antimicrobial susceptibilities are presented in Table 4. Antimicrobial activities varied considerably for chloramphenicol, gentamicin, sulfamethoxazole-trimethoprim and tetracycline,

Table 3. MRSA from Intensive (ICU) and Non-Intensive Care (Non-ICU) Areas

		# of MRSA Isolated from Patients with MRSA Acquired at											
		Hospital				Other Institutions				Community			
Year	#	ICU	(R)	n-ICU	(R)	ICU	(R)	n-ICU	(R)	ICU	(R)	n-ICU	(R)
1986	23	3	(3)	17	(7)	0	(0)	2	(0)	0	(0)	1	(0)
1987	49	6	(4)	28	(8)	4	(3)	3	(1)	0	(0)	8	(1)
1988	66	15	(8)	38	(14)	2	(2)	4	(4)	1	(0)	6	(2)
1989	79	20	(15)	46	(24)	0	(0)	9	(1)	0	(0)	4	(1)
1990	31	3	(0)	20	(8)	1	(1)	2	(1)	1	(0)	4	(1)
1991	22	4	(2)	14	(2)	0	(0)	0	(0)	1	(0)	3	(1)
1992	37	11	(9)	14	(5)	0	(0)	2	(0)	1	(1)	9	(3)
1993	66	18	(13)	29	(9)	1	(1)	5	(5)	3	(3)	10	(3)
1994	53	12	(6)	28	(15)	0	(0)	6	(1)	1	(1)	6	(1)
1995	52	12	(10)	17	(6)	1	(1)	9	(6)	5	(2)	8	(1)
1996	26	6	(6)	6	(1)	2	(1)	2	(0)	4	(2)	6	(0)
Total	504	110	(76)	257	(99)	11	(9)	44	(22)	17	(9)	65	(14)

ICU (intensive care units including coronary, medical and surgical), **n-ICU** (non-intensive care unit), **R** (respiratory tract specimens)

yet remained somewhat stable for others like netilmicin, rifampin, bacitracin, and mupirocin. Overall, *in vitro* antimicrobial activities were lowest from 1991 to 1992. Some antimicrobials actually showed greater activity in recent years (e.g., gentamicin, sulfamethoxazole-trimethoprim).

Phenotypic analyses of MRSA with common patterns (i.e., at least 10 isolates/pattern) were compared in Table 5. Isolates from patterns 86-02, 86-12, 87-15, 88-24, 89-43, and 90-51 were nosocomially acquired over 72% of the time (Table 5). Isolates with the following patterns were most prevalent as noted: pattern 86-02 (1986-88), 86-12 (1987-89), 87-15 (1989), 88-24 (1989 and 1992-95), 88-29 (1993), 88-33 (1992-94), 89-39 (1994-96), 90-51 (1993-94) and 93-72 (1993).

During the study period, weekly tabulations were taken to determine the number of *all* MRSA isolates (pathogens, colonizers, and contaminants) from in-patients. In 1989 there were 11 weeks when five or more MRSA were isolated from in-patients, whereas in all other years there were only 0 to 4 weeks when five or more MRSA were isolated. Increased MRSA in 1989 is consistent with the occurrence of epidemic MRSA. MRSA patterns which were most common in 1989 were 86-12, 87-15, and 88-24. Isolates with patterns 86-02, 86-12, 87-15, and 88-24 were likely to have included epidemic strains due to their occurrence in a defined period and their predominance in Medicine Service patients, sputum and wound cultures, hospital acquisition, and non-ICU patients.

Discussion

Several of the findings in this study are of special interest including an increase in community-acquired MRSA, diversity of MRSA phenotypes, and increased proportions of MRSA from respiratory tract and nosocomially acquired MRSA in intensive care patients.

One of the most interesting findings in this study was an increase in community- acquired MRSA and a decrease in nosocomial MRSA from 1986 to 1991 compared to 1992 to 1996. One factor favoring an increase in community acquisition was a decline of in-patients admitted from 1990 to 1996, thus decreasing the chances of hospital acquisition and increasing the chances of community acquisition. Furthermore, the majority of community-acquired MRSA were from patients admitted from their homes. An increase in MRSA from patients who live at home is important because often it is assumed that most community resistance to methicillin comes from nursing home residents. Indeed, we found that methicillin resistance in *S. aureus* was higher among nursing home residents than hospitalized patients in Oklahoma City.[10] However, data from this study suggest that methicillin resistance also occurs among individuals who live at home.

An increase in community-acquired MRSA is dependent on valid definitions of acquisition from the community, hospital, and other institutions. In this study, MRSA isolated or suspected to be present during the first two days after admission were classified as community acquired. However, some people might question the validity of data based on this definition, assuming that most patients are *not* cultured during their first two days after hospitalization. Therefore, some might suspect that MRSA were misclassified as community when indeed they were nosocomial. Conse-

Table 4. In Vitro Antimicrobial Activities by Year

Year	# Tested	# of MRSA Isolated from Patients with MRSA Acquired at % Susceptible									
		C	GM	SXT	TE	IPM*	CIP	NET	RA	B	MUP
1986	23	91	13	13	17	87	48	100	87	96	96
1987	49	98	10	22	29	92	80	100	98	94	100
1988	66	83	11	11	59	73	39	100	95	89	100
1989	79	80	13	14	66	53	20	100	90	96	99
1990	31	77	19	26	71	26	23	97	84	97	100
1991	22	38	33	24	55	33	10	82	91	95	100
1992	37	35	43	35	76	8	3	89	92	92	95
1993	66	45	38	45	79	23	5	95	86	97	85
1994	53	43	58	45	74	9	2	100	91	94	87
1995	52	60	46	52	79	19	4	100	96	98	87
1996	26	81	77	77	88	31	12	96	100	85	85
Totol	504	67	31	32	65	42	22	97	92	94	94

C (chloromphenicol), **GM** (gentamicin), **SXT** (sulfomethoxazole-trimethoprim), **TE** (tetracycline), **IPM** (imipenem), **CIP** (ciprofloxacin), **NET** (netrilmicin), **RA** (rifampin), **B** (bacitracin, topical), **MUP** (mupricin, topical)

*this antimicrobial is not approved for therapeutic use versus MRSA

quently, hospital computer records were checked to determine if *any* cultures were done on our patients during their first two days after admission. Of 432 patients with available computer records, 333 (77%) had a culture performed during their first two days after admission (unpublished data). So, patients with MRSA were likely to have routine cultures (not MRSA screening cultures) taken during their first two days after admission. If one assumes that cultures were initiated appropriately (i.e., based on clinical signs and symptoms consistent with infection), then it could be concluded that MRSA would most likely be detected during the first two days if causing disease. In addition, the definition of nosocomial included patients who were readmitted to the hospital within 30 days. This long inclusion period of 30 days tends to bias for the selection of nosocomial. Therefore, an increase in community acquisition is a conservative estimate.

Other investigators have noted increases in community-acquired MRSA. Layton et al. found evidence to support an increase in community acquisition of MRSA among 87 patients, and they associated community acquisition with recent hospitalization, previous antibiotic therapy, nursing home residence, and intravenous drug use.[15] Saravolatz et al. found community-acquired MRSA infections occurred in drug abusers who became patients at a Detroit, Mich., hospital.[16] Hamoudi et al. found evidence of MRSA which originated in the community in children from Ohio.[17] Our patients with community- acquired MRSA were different in two ways because they came from their homes (not readmissions) and less than 1% of the 504 patients were admitted for reasons consistent with drug abuse (unpublished data).

An important basic question is whether patients are infected with a single strain or multiple strains of MRSA. Infection with a single strain suggests a common source and usually an epidemic setting. Infection with multiple strains is more consistent with an endemic setting. Several investigators have found multiple strains of MRSA being introduced into their hospitals. Lugeon et al. studied MRSA (from 1989 to 1992) in 98 patients and found a high diversity of MRSA strains, suggesting that new strains were being introduced into their hospital continuously.[18] Embil et al. studied five tertiary-care teaching hospitals in Canada (1990 to 1992).[19] MRSA were identified in 135 patients and most were believed to be community-acquired, representing multiple strains. Nicolle et al.[20] and Layton et al.[15] found that MRSA strains introduced into hospitals had diverse origins. Trilla et al. found multiple plasmid types of endemic MRSA among 270 isolates.[5] Findings from this study suggest that most of our isolates were endemic with 69 phenotypes in 504 MRSA. However, isolates with patterns 86-02, 86-12, 87-15, and 88-24 were likely to have included epidemic strains due to their occurrence in a defined period and their predominance in Medicine Service patients, sputum, and wound cultures, hospital acquisition, and non-ICU patients.

Phenotypic analysis is not as accepted as ge-

Table 5. Phenotype Analysis

			% Susceptible										
Pattern	**#**	**Med**	**Surg**	**Oth**	**Resp**	**Wd**	**Ur**	**Bld**	**Ho**	**OT**	**CO**	**ICU**	**n-ICU**
86-02	66	62	35	3	46	27	21	6	79	9	12	23	77
86-04	15	67	20	13	20	60	13	7	53	27	20	20	80
86-12	32	66	31	3	44	31	19	6	72	16	12	22	78
87-15	39	69	26	5	36	33	21	10	82	18	0	28	72
88-24	68	63	31	6	49	34	10	7	75	9	16	31	69
88-29	21	76	24	0	48	14	9	29	52	24	24	48	52
88-33	24	67	33	0	46	42	8	4	67	8	25	21	79
89-39	55	55	42	3	51	29	13	7	64	16	20	35	65
89-43	17	71	24	5	41	47	6	6	76	12	12	18	72
89-47	10	80	20	0	50	40	10	0	60	0	40	30	70
90-15	17	82	18	0	59	29	6	6	88	0	12	29	71
93-72	10	70	20	10	60	10	30	0	60	40	0	20	80
Others*	130	66	31	3	45	41	10	4	76	8	16	27	73
Total	504	66	31	3	46	34	13	7	73	12	15	28	72

* (all other 57 patterns combined)

Comparisons:
Medicine (Med) versus Surgery (Surg) versus Other (Oth); Respiratory (Resp) versus Wound (Wd) versus Urine (Ur) versus Bolld (Bld); Intensive care unit (ICU) versus non-ICU (non-Intensive Care Unit); Hospital (HO) versus other institutions (OT) versus community (CO) acquired

notypic analysis of MRSA. Phenotypic analysis by antimicrobial susceptibility testing is reported to be less reproducible and have less discriminatory power than genotypic methods such as pulsed field gel electrophoresis (PFGE).[21] However, when testing hundreds of isolates, the cost and time for performing PFGE is prohibitive, whereas antimicrobial susceptibility testing by disc agar diffusion is inexpensive, easy to perform, and timely. In addition, most antimicrobial typing systems utilize only a few antimicrobials and are performed for short periods where reproducibility might be more unlikely. In this study, 10 antimicrobials were used and one person performed all typing for 11 years, thus optimizing the usefulness of phenotyping.

Another important finding was that among the 490 patients with MRSA, those from ICU patients were more likely to come from respiratory tract specimens than those from non-ICU patients. Ibelings and Bruining reported that the most frequent intensive care-acquired infections were from the respiratory tract in 78 Dutch ICUs from 17 West-European countries.[22] Since patients in ICUs often require support for breathing, ventilators are suspects for involvement with acquired pneumonia. Rello et al. reported on ventilator-associated pneumonia caused by methicillin susceptible *S. aureus* (MSSA) and MRSA.[23] MRSA-infected persons were more likely to have received steroids before developing infection, to have been ventilated, to have been older than 25 years, to have chronic obstructive pulmonary disease, to have received antibiotics, and to have a higher mortality than MSSA-infected patients. Previous antibiotic therapy was the most important risk factor for developing MRSA infection. Indeed, Lewis and Saravolatz found recent cephalosporin therapy was more common in MRSA than MSSA patients with endocarditis.[24] Lentino et al. found prior antibiotic therapy, days hospitalized prior to diagnosis, and number of associated diseases per patient to be risk factors for acquiring MRSA more often than MSSA.[25] Masaki et al. noted a reduction in MRSA nosocomial pneumonia and bacteremia after increased efforts for handwashing, better prevention and care of pressure sores, cleaning the upper respiratory tract to prevent lower respiratory tract infection, cleaning floors, and staff education.[26]

Finally, by studying the endemic occurrence of MRSA over a long period, problems and trends can be identified followed by plans for reduction of MRSA infestation among patients.

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Professional Resistance to Managed Care in Oklahoma: An Issue of Quality

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Anecdotally one hears a great deal of concern and anger expressed by Oklahoma health care professionals over the growth of managed care in Oklahoma. Little has been in the professional literature, however, that explains the source of this resistance. The Oklahoma Rural Research and Demonstration Center sponsored a project to explore the opinions of Oklahoma health care professionals in regard to managed care. A 38-item written questionnaire was distributed to Oklahoma health care providers, health professions faculty, and health professional students. The results showed widespread concern about managed care across each of the groups. Primarily, these concerns were about the issue of quality. Differences between groups are also highlighted. Discussion centers around health professionals' lack of trust in managed care systems to do what is medically appropriate when cost is a counter consideration. Further discussion outlines what might be done to alleviate concerns and train new health professionals for a managed care environment.

Physicians are often labeled as conservative and resistant to change. However, it is unclear whether this is enough to explain the opposition to new models of care that is currently being verbalized in the practicing community. As managed care is introduced into medical practice in Oklahoma, much is being said by the health care community—verbally and often privately—about its horrors. Yet little has been documented and written about these opinions, and even less is known about the origins of the negative perceptions about managed care.

A recent survey of the general public's opinion in rural Oklahoma showed that managed care, if thought about at all, is generally viewed with skepticism (St.Clair, et al, 1997). The only areas on which rural Oklahomans had clear opinions were their dislike of having no choice of physicians in managed care systems, even if money were saved, and their conviction that the traditional way medical care is financed (fee-for-service) is not working and that change is necessary.

Oklahoma health professionals have editorialized the lack of appreciation by HMOs and managed care systems for the indispensable role personal physicians play in health care, and the need to foster the patient-doctor relationship (Haines, 1996; Blumental, 1995). Haines (1996) was also critical of how health care has become simply a way for big business to make money, and how too many physicians were willing to pledge allegiance to the HMO but wouldn't stand in solidarity with other health care providers. Warner (1996) worried that the financial arrangements required by managed care systems and HMOs might reverse the traditional advocacy role of the physician for the patient and create a financially driven, adversarial role. Expressing the professional view in more strident terms, Stein (1996) equates managed care, and its hidden

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agenda, with the holocaust of World War II Germany.

Wellever, et al (1996) did a telephone survey of rural physicians in Minnesota and Oklahoma, and found that opinions of rural physicians toward HMOs were essentially negative in both states, although more so in Oklahoma. Primary care physicians were more favorable toward HMOs than specialists, and those with provider contracts with HMOs were more favorable than those who did not have contracts. Physicians' dislike for HMOs did not seem to affect their willingness to participate in HMO arrangements, however; it appeared to these authors that physicians accepted HMOs as a fact of life which they had to tolerate.

Physicians in Oklahoma who had been asked to join an HMO and who had refused, expressed concern over the loss of clinical autonomy and a feared negative impact on physician-patient relationship (Wellever, et. al, 1996). On an agree-disagree Likert scale, all physicians in Oklahoma—those in an HMO arrangement and those who were not—disagreed that HMOs would allow them to maintain practice autonomy, increase income potential, or improve quality of care.

The current research project was undertaken in an effort to explore more fully the basis for these cautionary and critical opinions by Oklahoma health professionals toward managed care, and to attempt to identify areas where improvement in understanding is possible.

Methodology

A thirty-eight item survey questionnaire was developed from current literature on managed care, with assistance from consultants from the Oklahoma Area Health Education program, the Oklahoma State Department of Health, and private practitioners.

Letters explaining the study and survey were sent to, (1) one hundred health professional students rotating through OkAHEC programs and those attending the AHEC Interdisciplinary Student Summit, (2) one hundred twenty-five rural health providers and preceptors known to the state AHEC programs, and (3) fifty faculty on the OkAHEC Advisory Board and health professions faculty from Oklahoma colleges/universities.

Of the 275 surveys mailed, 190 surveys were returned for a response rate of 69%. The timing of the mailing for the questionnaire (summer) was not conducive for a large return from students, from which there was only a 53% return. Seventy percent of the faculty returned surveys, as did 82% of the providers. Providers, therefore, made up over 50% of the total sample (Table 1).

Table 1. Number of Responses by Professional Group

Health Professional	No. Surveys Sent	No. Surveys Returned	Percent Returned	Percent of Total Sample
Faculty	50	35	70	18
Provider	125	102	82	54
Students	100	53	53	28
Total	275	190	69	100

Table 2. Health Professionals Represented

Faculty		Provider		Student	
Physician	37%	Physician	19%	Physician	55%
RN	23%	Public Health	16%	Psychology	9%
Health Ed.	17%	RN	14%	PA	6%
PA	6%	Admin.	10%	Public Health	6%
Public Health	6%	Nurse Pract.	7%	RN	6%
Other	11%	Psychology	7%	Nurse Pract.	4%
		Other	27%	Other	14%

Responses from 33 Oklahoma counties were received. Most were from Oklahoma (15%) and Tulsa (9%), Blaine (5%), Garfield (5%), and Washington, Comanche, Creek, Ellis and Texas (3% each). All other Oklahoma counties of residence made up 23% of the sample. Residence was unknown for 29% of the sample due to no response to the question.

Physicians comprised the largest segment of each group sample, although nursing and public health were also well represented (Table 2).

The faculty sample had taught, on average, 13.3 years. Health care providers indicated that they had practiced 14.9 years on average. The student, on average, had 1.5 years until graduation.

The original six-point scale was converted to a three-point scale for ease and accuracy of interpretation. "I don't know" and "Neither agree or disagree" were combined as "No Opinion." "Strongly disagree" and "Disagree" were combined as "Disagree," and "Strongly agree" and "Agree" were combined as "Agree." Chi-square tests were conducted on each question looking for differences among the three sample groups.

Results

Table 3 exhibits how the health professional sample as a whole, and as distinct groups, responded to the items on the questionnaire which dealt with managed care:

1. All groups agreed that managed care will

Table 3. Results of Survey of Health Professionals and Students Regarding Managed Care

	Overall %			Faculty			Provider			Student		
	Dis	DK	Ag	Dis	DK	Ag	Dis	DK	Ag	Dis	DK	Ag
1. Monoged care lawers the cast af health care.	24	23	53	26	26	48	22	22	56	28	23	49
2. Manoged care shifts the facus af health care delivery toword prevention af illness ond injury instead af just facusing on treotment.	38	17	45	43	17	40	35	13	52	42	26	32
3. In monoged health care systems the quolity af medical core is less thon thot of nan-managed heolth core systems.	26	24	50	37	29	34	28	20	52	15	30	55
4. Managed heolth core systems will pravide fewer health care services.	24	15	61	28	6	66	26	18	56	17	15	68
5. In o monoged care system cansumers should be willing ta accept limits on chaice af physicions in arder to sove maney.	48	15	36	26	20	54	45	14	41	70	15	15
6. In a managed care system I would expect my incame ta be less than in a fee-for service system.	26	29	45	26	31	43	25	35	40	30	15	55
7. It is passible to manage health care delivery in o way that preserves the independence af the praviders' clinical judgement an behalf af the cansumer, and at the same time limit the inappropriote ond inefficient utilizatian af medicol resaurces.	16	17	67	17	17	66	17	17	67	13	17	69
8. The traditianal way health care is delivered and paid far naw is fine naw (fee-far-service). Na changes are necessary.	34	21	15	83	9	9	67	17	18	49	38	13
9. I wauld be more inclined ta jain a private managed care system than a public ar government system.	16	28	56	17	34	49	21	27	52	5	25	70
10. It is sametimes appropriate ta pravide marginally subaptimal health care in exchange far cantoining casts.	75	12	13	71	11	17	79	10	11	70	15	15
11. Preparing profassionols far managed care will require significant changes in the curriculum af health professianal training pragroms.	19	21	59	11	17	71	21	19	60	21	30	49
12. Market evalutian taward a fully managed and capitated system af health core delivery is inevitable.	29	29	42	23	26	50	29	26	45	33	37	30
13. Managed care systems result in deloyed referrals, deloyed treatment, ond consequently increased marbidity ond premature mortality.	26	26	48	26	26	48	33	22	45	33	37	30
14. Overall, I opprove af the trend taward monoged health care.	41	32	27	34	23	43	41	29	30	48	44	8

5. $X^2 = 19.99$ p.0005 8 $X^2 = 15.93$ p.0031 14 $X^2 = 15.80$ p. .0033

lower the cost of health care, with providers believing this to be true more so than faculty and students.

2. Providers agreed that managed care shifts the focus to prevention as well as treatment. Faculty were split in their opinion, while students were more likely to disagree.

3. Providers and students agreed that quality of care is less in managed care systems. Faculty were split in their opinion. There was also significant uncertainty on this issue expressed by faculty and students.

4. All groups were in substantial agreement that managed care will result in fewer health services provided.

5. There is a *statistically significant difference* among groups on the proposition that consumers should accept limits on choice of physicians in order to save money. Faculty agreed with this statement, providers were split, and students adamantly disagreed.

6. Students agreed that they would expect their income to be less under managed care. Faculty and providers tended to agree, although a significant proportion of both were unsure.

7. There was strong agreement among all groups that it is possible to manage a health care system that balanced quality clinical care and patient advocacy with cost effective utilization and treatment.

8. Faculty and providers disagreed that the traditional way of financing health care was fine, and that no changes were necessary. Most students disagreed with that statement as well, but were less adamant and expressed considerable uncertainty. These differences in the levels of disagreement were *statistically significant.*

9. All groups agreed that they would be more likely to join a private managed care system than a government system, with students more certain than faculty or providers.

10. All groups overwhelmingly disagreed that it might sometimes be appropriate to provide suboptimal care for cost saving reasons.

11. Faculty and providers agreed that curricular changes for preparing health professionals were necessary in a managed care environment. Students were less sure.

12. There was some agreement among faculty and providers that the trend toward managed care was inevitable; students were clearly split and showed a high degree of uncertainty about market evolution.

13. All groups showed moderate agreement that managed care results in delayed referrals and treatment, and therefore increased morbidity and premature mortality.

14. There is a *statistically significant difference* among groups on their approval of the trend toward managed care: faculty tend to agree but are split, providers lean toward disagreement, and students, while they too disagree with the trend, also expressed a considerable amount of uncertainty.

In order to better understand each sample's attitudes toward managed care, questions were grouped into Background and Pro/Con constellations. *Background* questions identify the respondent's beliefs about the current environment surrounding managed care. For example, all groups disagreed that no changes are necessary in the way we currently deliver and pay for health care, although a large proportion of students could not agree or disagree with this position. Only faculty clearly agreed that managed care is inevitable; providers were less sure and students were evenly split among their responses. All groups expressed a preference for private managed care systems over government/public systems (assuming they were forced into making a decision).

Pro/Con responses are determined by the questions themselves and sometimes by the way they are answered. Expressing a "Pro" opinion toward managed care, all groups indicate that they believed that managed care would result in lower costs for health care. All groups supported the proposition that a balance between quality/advocacy and cost effectiveness is possible.

Agreeing that managed care shifted the focus of care toward prevention as well as treatment would have been a "pro" stance but only providers believed this to be true. Agreeing that consumers should be willing to accept limits on choice of provider in order to save costs would also have been a "pro" position; however, only faculty agreed with this statement, while students were in strong disagreement ("con"). Approval of the trend toward managed care would also have been a "pro" position about managed care. However, only faculty tended to take this position.

"*Negative*" sentiments were expressed by providers and students in their belief that quality of care is less in managed care systems. All the groups agreed that managed care would result in fewer services provided. All groups also expressed strong disagreement with the proposition that it is sometimes appropriate to provide marginally sub-optimal health care in exchange for containing costs (as some critics claim that managed care systems do). A negative stance regarding managed care is certainly expressed in the agreement by each group that managed care results in delayed referral and treatment, increased morbidity and premature mortality. No inferences of favorable/

unfavorable were made from responses to the question about reduced income or need for curricular changes.

Discussion

It has been widely reported that much of the health care community in Oklahoma was not enamored with the idea of managed care. This project suggests that the dissatisfaction is centered around perceived quality of care issues: quality is thought to be substandard under managed care, and services restricted. It is thought unacceptable to provide sub-optimal care in order to save money, and managed care is believed to result in delayed treatment and increased morbidity/mortality. Managed care is believed to save money, but if the savings come at the cost of the above feared outcomes, then Oklahoma professionals would not consider cost containment to be a virtue, or worthy of the effort of change

A seemingly "magical" belief that a solution can be found to "save the system" is reflected in the responses to two questions that were answered the same by all groups: (1) disagreement with the proposition that the traditional system—pre-managed care, fee for service—does not need to be changed; and (2) agreement in the belief that it is possible to find a balance between quality care, patient advocacy, and efficient utilization of resources. These shared beliefs may be useful as a spring board for serious reworking of the strategies currently in vogue for restructuring health care, but the health care profession has to take an assertive lead in getting others in the "industry," as well as consumers, to the table for discussion.

A recent article by Balint and Shelton (1996) might offer an appropriate model for the needed dialogue to follow. These authors propose an alliance between physicians and their patients, in which the appropriate use of medical resources is the foundation to decision making about care. In this alliance, (1) the physician is trusted to advocate the most appropriate course of treatment for the patient, (2) this advocacy includes full disclosure of outcome expectations based on the best medical research, as well as full disclosure of options given limited societal resources, and (3) the patient's decision is well informed and considers the impact on the larger "class of patients," i.e., the society at large. Although they acknowledge the "idealistic" nature of their proposal, Balint and Shelton (1996) argue that the alliance is possible if physicians take a more visible lead in this debate on the side of the patient, and take more time to educate the patient on the issues of efficacy of treatment options and their impact on society.

A unified voice may not be easy to achieve. Health care professionals in Oklahoma rarely speak with a common voice. Differences among the three groups—faculty, providers, and students—are, at times, quite apparent. Faculty appeared to be more resigned and accepting of the notion of managed care, possibly due to the fact that they practice in a highly managed environment and subsequently see managed care as less of a threat, although there seemed always to be an active dissenting core. Faculty may also see more clearly the need for a change in the way that health care is provided, as they are responsible for greater numbers of poor patients and understand the theoretical underpinnings of managed care more clearly than providers or students. Faculty would also be at the least economic risk from the changes that are anticipated with managed care, as they are in largely salaried positions.

Providers were more negative to the concept of managed care, but not nearly as negative as were health professional students, who were often very clear in their opposition. It is unclear as to the "reactionary" belief system that is articulated by the students. One would anticipate that medical students would have limited experience with the economics of medical practice and would have no personal stake in this discussion. This is obviously not the case, however. Might student attitudes reflect "reaction" to faculty acceptance of the trend? Or does this represent a selection bias of the students that were surveyed (i.e. students on preceptorships, which were largely in private practice settings), resulting in a student belief system representing a reflection of the anxiety engendered by the precepting providers?

The opinions of Oklahoma health professionals converge with those of rural Oklahomans in agreement that managed care lowers costs and shifts the focus to prevention, their dislike of limitations on provider choice, and agreement that change is necessary (St. Clair, et al, 1997). Overall, agreements between the public and the professionals were few; perhaps more importantly, however, is that disagreements were even fewer. This finding is not surprising when one considers that independence is a strongly held virtue, both by Oklahoma citizens and physicians. Since most rural Oklahoma residents are there by choice and are extremely independent in their thinking and belief system, concordance with physician beliefs might be expected. It does not explain the lack of differences of beliefs, although there continues to be a belief among patients that it is dis-

respectful to disagree with the "status quo," especially if it is expressed by trusted professionals.

One difference between the survey of public opinion in rural Oklahoma on managed care and the current study is that health professionals answered far less frequently with an "I don't know" response. For the most part, Oklahoma's rural public appears not well informed about managed care. In many markets, this has been used by the managed care organization to its benefit. By articulating all of the benefits, while totally ignoring the anticipated problems, it would be quite easy to motivate change. It is much easier to do this with patients who often look at the short-term cost, rather than the long-term consequences. Physicians, on the other hand, have a motivation to look for the consequences of these changes, whether that is a financial focus, a quality focus, or a resistance to change the traditional patient/physician relationship. Oklahoma health professionals, though they may not always firmly agree or disagree, do seem to be knowledgeable about the concept of managed care.

It is also interesting to speculate as to why students were so negative to the idea of managed care, more so than either faculty or providers. It could be that these students, with only a year and a half to graduation, began their professional educational journey prior to the onset of managed care in Oklahoma, when a fee-for-service, specialty-driven environment still ruled. Now, just as they are getting ready to enter the workforce, the rules are changing and they are expressing their frustration toward the new reality.

On the other hand you would expect their belief system to be less "entrenched," and more "moldable," as many of their beliefs are being modified as part of their education. This presents faculty and preceptors with the opportunity to be an agent of change, as they educate and mentor medical students. This might also offer the opportunity for students to deal with ethical and motivational issues prior to establishing practice patterns as a clinician. Intuitively, this would make sense from the educational process perspective.

Whatever the reason behind the students' negative opinions on managed care, overt expression of these opinions will not serve them well in a recruitment environment where commitment to the concept of managed care is a consideration for employment.

As far as the interrelationship between managed care and health professional education, there was agreement, especially among faculty, that managed care would require changes in curriculum, although the specifics of these changes were not explored in this study. Many faculty are not well versed in managed care concepts themselves, and students are therefore not exposed. Their time is taken with learning an ever-increasing amount of clinical knowledge, and further expansion of the curriculum is resisted. It is obvious that insight, innovation, and some idealism and risk taking will be necessary in fashioning needed curricular change.

Conclusion

The generally negative opinions toward managed care expressed by Oklahoma health care professionals can perhaps be reduced (or elevated depending on your point of view) to one of trust or, more precisely, the lack of trust with the changes that are being undertaken with the introduction of managed care into the practice of medicine. Professionals simply do not trust managed care systems to do the right thing—put quality of patient care before profit. To convince professionals otherwise will take time and repeated experience in clinical situations where the dollar does not rule. Opportunities for dealing with this "reactionary" belief system, while the physician is still in training, exist and should be encouraged.

Other tangible proofs which managed care systems might initiate to gain professional and public trust include: (1) regularly published health status reports of covered patients, (2) published "quality protocols" showing decision trees favoring patient care rather than cost containment, (3) removing gag rules for physicians in managed care systems which prohibit them from discussing all treatment options with patients, and (4) consumer members, in sufficient number, sitting on outcome review panels.

Health care professionals need to foster wide public support for these measures and demand that managed care systems respond. Perhaps cost savings and quality care can co-exist. It behooves all involved professionals, the managed care systems, and the public to come to the table and try to make it work.

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Euphemism in the Language of Managed Care

Howard F. Stein, PhD

Ostensibly, the subject matter of monaged care (and of corporote medicine) is business exigency such as cost containment. Through the quolitative, linguistic study of the culture of biomedicine via porticipation in it os a clinicol teacher, the author orgues thot the subject of monaged core ond downsizing is the fontosized magical conquest of death through the idiom of heolthcore economics. The *bottom line* is not about the *[economic] bottom line,* but about dreod, loss, hotred, greed, o world of dire scorcity, a world felt to be out of control. The scope of the terms *manage, to manage,* and *management* is explored. Furthermore, the attitude toward humon relotionships ond to the world thot characterizes the languoge of monoged core, can be found far beyond the borders of Americon biomedicine. Euphemism ploys o central role in tronslating destructiveness into bonolity, of masking motivotions, resulting in the degradotion of the physicion-potient relationship, of health core, ond of the personal intimocy that has long been ot leost on ideal of the physicion role. Greoter self-consciousness and self-criticism of the words ond phroses we use in heolth core will help oll proctitioners and teachers to understond, emotionolly os well as intellectuolly, the deeper meonings, wishes, feelings, ond conflicts behind monoged care--ond which will no doubt be behind the clinicol ideologies thot ore sure to follow when the monaged core ero passes.

Whatever else *managed care* and *downsizing* are, they are about language, about what we say (and do not say). Euphemism holds a key to understanding them and their destructive power.

Consider the following familiar scenario: A new CEO, department chair, or division head of a hospital, clinic, or academic institution announces an "open door policy," encourages the expression of fresh, even critical ideas. Yet every visit to his office is met with rebuke, revenge, even dismissal. "Open door" meant closed-minded and hard-hearted, but no one dares to say so and has to act as if the CEO welcomes dissenting views. The workplace is shrouded in euphemism, a subtle, symbolic form of violence in the modern workplace.

Degradation by euphemism takes the form of code words and phrases, which together constitute a vocabulary of deceit. For example, a worker is "empowered" by above and by peer consensus so long as he or she does not depart from the party line. "The bottom line" is about values and power in the guise of business goals. Often, an executive's admonition to be a "team player" is less about collaboration toward a common mission than it is submission to hierarchy. Enfranchisement is really disenfranchisement. Euphemism is the opposite of speaking plainly. Yet it is avidly defended by its proponents as precise. It is the language of obligatory concealment, of decep-

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tion and self-deception, and of the always-imminent threat of exposure, ostracism, or worse.

Euphemism is a figure of speech, one that works in very specific ways. It is a specific form of symbolic operation. As a symbol that represents something else, euphemism ostensibly simplifies and clarifies, but in fact it mystifies. It masks; it cunningly affirms and negates. "Look here, not there," it commands and reassures. The original emotion is almost entirely split off from the concept presented in the euphemism. The euphemism softens the harsh reality of our intentions and deeds. We think of someone as "ugly," call that person "plain," while still thinking "ugly"; or we might convince ourselves that we no longer really feel that the person is "ugly." Euphemism serves as a rhetorical device that implements destruction while creating the appearance of doing something far more palatable. The work of euphemism is about saying something apparently nice, while meaning, if not doing, something terrible. Euphemism's endless substitution serves the purpose of decoy.

We use euphemism to make something bad into something good, or at least less bad-sounding. For example, the bloody "beheading" of a king or queen becomes a "shorn crown"; the death of tens of thousands of civilians unseen from distant missile launchers becomes "collateral damage"; the "firing" of thousands of employees at a time becomes "RIFing"; the commoditization of human suffering and its medical treatment becomes a "product line." Euphemism prettifies and justifies something else un-pretty, in fact, the brutal, the gory.

Euphemism is not only descriptive, but prescriptive and proscriptive. It is an imperative about the way reality is to be perceived. It sends a clear message about what can and what cannot be discussed or even noticed. It simultaneously directs attention toward and away from something. Euphemism is the language of rationalization in the guise of rationality. Euphemism understates, anaesthetizes. The language of euphemism is obligatory, not voluntary, a point grimly taught by George Orwell in his novel *1984,* published in 1949. Euphemism is a matter of aesthetics and politics, of power and dread. The popularity of humorist-cartoonist Scott Adams' "Dilbert" newspaper character attests to the widespread horror with which we live in daily organizational life. "Dilbert" is at least a safety valve to unmask euphemistic workplace language. Physician colleagues have come recently to talk cynical Dilbert-ese in clinical conferences: e.g., for instance, "HMO patient education is marketing. They promise 'We'll give you [prospective patients] everything.' Say you'll take care of patients to get them [the practice plan]—but then never do it."

Thirty or so years ago, American language was dominated by images of abundance ("The War Against Poverty"); ours today is an ethos of scarcity. Entitlement and non-entitlement are equally our creation, born of our values, not givens of the marketplace. "The bottom line" is always a value, even when we insist that it has a dollar sign and is only about business ("just business"). Via euphemism, managed care and downsizing reflect and enact an attack on all core cultural meanings that are not immediately profitable. In the process, "the bottom line" has acquired the quality of the sacred, the unquestionable.

The systematic attempt by the Nazi regime to collect and annihilate every Jew on earth was codeworded, "The Final Solution to the Jewish Problem." One of its chief and most zealous administrators, Adolf Eichmann, was called "Minister of Migration" (He made sure the trains to the slave labor and extermination camps ran on time.) Euphemism is steeped in the very aggression and violence it—which is to say those who use it—denies. Bureaucratic banalities and supposedly "objective" protocols hide the evil their members wish to carry out.

Let me add several caveats or qualifications here, caveats in the form of baselines against which to calibrate the damage already or potentially done by managed care and downsizing. My purpose is not to lessen the pungency of my argument, but to avoid us/them splits that idealize some people or eras and demonize others in the past or present. History is always central to a good diagnosis. Physicians have had a long-standing ambivalence toward including money matters directly in office visits with patients. The financial or "business" side of medicine is someone else's business—even if that someone else is one's own employee in the finance office down the hall from the exam room. Money and medicine, though in fact joined, have long been split, because medical care is supposed to be entirely in the patient's best interest, though in fact medical care is also a livelihood for physicians and other health care professionals. Billing and collections is an onerous task delegated to others outside the boundary of the doctor-patient relationship. This division of labor is one way that medical care has long been "managed."

Another way is the dominance of management thinking (long an American cultural obsession to control everything) by physicians toward patients: to "manage" a patient is to obtain control, compliance. Managed care now tries to exact a sim-

ilar control from physicians as well. In managed care, *both* physicians and patients are "managed." "Compliance" is expected from both. In the ostensibly golden age of fee-for-service, many physicians operated high "patient volume," impersonal, assembly-line-like practices. If physicians fear that they will have to abide by a "cattle-drive principle" under corporate medicine, the principle already has a long history—albeit the trail drovers were the solo or group practitioners themselves rather than outside executives. But even the inside/outside distinction cannot be pushed too far. For, easy as it is now to blame CEOs and MBAs for foisting managed care on physician-victims, the fact is that many of the medical corporate administrators are themselves also physicians. Often "they" are "us." Psychologically speaking, health and mental health professionals who openly disavow earlier held ideals about the sanctity of clinical relationships and about the importance of continuity in such relationships, rely heavily upon such defenses as identification with the aggressor, projection, rationalization, and intellectualization to avoid pangs of anxiety, guilt, and shame over accepting the newer clinical ideologies. Dehumanization of others always comes at the price of dehumanizing oneself as well.

There was abundant physician-driven excess in an earlier era now falsely romanticized as the height of the intimate doctor-patient relationship (e.g., individual physician choices to generate additional income by ordering laboratory tests and performing procedures). The excess of corporate medicine is both quantitative and qualitatively different. The "cattle drive" both presses physicians and their staffs to see more and more patients in less and less time; the less-is-more principle also discourages as many people as possible from coming to the doctor's office in the first place (the "triage" principle in nursing). Further, the excess of managed care is more subtle and more sinister precisely because it is far less visible and from the outside seems far less personal.

Decision-making in corporate medicine is far more dangerous, and workers, patients, and families are all more vulnerable because economic and clinical decision-making takes the form of what Michael Balint in a different context four decades ago termed the "collusion of anonymity" (*The Doctor, His Patient and the Illness*. New York: International Universities Press, 1957; revised edition 1972). Now, for the most part, there is no secret, conspiratorial cabal in this collusion. It is very ordinary, very businesslike. The decision by many, the decision by committee or group, and the anonymous decision-by-protocol seems to be a decision by no one. No one is ultimately responsible, while all the while clinical decision-makers fall back on the infallibility of "the bottom line." Those who make life-determining decisions about insurability or about medical care can act as if they are not making the decision themselves. If everyone decides, it is as if no one really decides: one can easily hide in the illusion of group consensus.

Ironically, we as a culture have together colluded on not challenging this way of thinking and speaking. That is the elusive nature of the "plotting" in what is in fact pseudo-anonymity. Ultimately, we choose even if we appear to abide by "the group." And what we choose—and what makes managed care in league with downsizing *qualitatively* different from its predecessors—is to create increasingly large numbers of superfluous, unwanted, disposable people.

In recent years, a number of clinicians have drawn our attention to the marketplace language we are permitting ourselves to be lured into using, among them, G. Gayle Stephens, MD; Edmund Pellegrino, MD; Ernest Warner, MD; and James Li, MD. In health care as everywhere, our language is an extension of our intentions; it is a footprint of who we are; it is a roadmap for what we do in the world. We would do well to be self-critical of the words we choose, the symbols we live by, for they, as much as the prescription of medication and the performance of medical procedures, have consequences in the real world. James T.C. Li, MD, draws our attention to the two distinct mental worlds competing clinical vocabularies now evoke, and to the ethical implications of embracing either:

> ... The market is driven by revenue, profit margins, and market share. No patients exist in a market-driven practice of medicine—only consumers for whom the watchword is caveat emptor.
>
> A great danger to the practice of medicine is the transformation of physicians to interchangeable, dispensable workers accountable only to their employers and the financial performance of the institution that employs them. In this setting, physicians and health care are simply commodities—cold and without compassion. The greatest danger, however, is *not* loss of the physician's autonomy, degradation of the profession of medicine, or transformation of health care to a commodity. The greatest danger is the transformation of the *patient* to the status of commodity. (James T.C. Li, "The Physician-Patient Relationship: Covenant or Contract?" *Mayo Clinic Proceedings*, 1996: 917-918, quotation, p. 918)

Earlier in his article, Li courageously cites the parallel process of physicians in Nazi Germany: "The most horrific example of physicians' abandonment of patients is the central role of physicians in the Third Reich.... recall the image of

the physician acting as gatekeeper and triage officer at the concentration camps" (1996: 917). (See the similar argument by Ernest Warner, MD, in the *Journal of the Oklahoma State Medical Association,* August 1996.)

The image of being human conveyed by the doctrines of downsizing and managed care can be evoked by juxtaposing the key words and phrases. By seeing them together, one can begin to feel the brunt of their power as euphemism. Euphemisms of mass layoffs: *downsizing, rightsizing, reduction in force, RIF (-s, -ing, -ed), restructuring, reengineering, delayering,* or *organizational flattening, vertical integration, product* and *product lines, outsourcing, off-shore, increased profitability, competitiveness, survival, autonomous work groups, survivor, victim, trimming the fat, cut down to the bone, a lean and mean organization.* Euphemisms of managed care: *manage (-ment, -ed, -r), marketplace, provider, customer, consumer, payer, purchaser of healthcare, healthcare* (noun, as product), *outcome-based medicine, evidence-based medicine* (outcome and evidence being narrowly defined), *increased profitability, covered lives, allocation of scarce resources, quality assurance, return on investment, financial risk, accountability, medical-loss ratios, fiscal risk assumption by physicians.* What seems a massive wall of words is in fact an impenetrable world view.

What happened, one wonders, to the at-least-espoused ideal of the intimacy in the physician-patient or nurse-patient relationship, to the wounded healer, to the elusive notion of the whole person, to human suffering? When numerous tasks are "outsourced," and many people fired, what happens to all the informal knowledge, to the vast informal "networking," and to the telephone "Rolodex" of the person whose role is narrowed and depersonalized? What happens to the treatment of a necessarily dependent sick person when a nurse is replaced by a technician trained only to insert tubes or needles? Worse, what happens to us and to them, when we no longer care to ask? The danger to patient care inherent in corporate euphemisms goes beyond the widely recognized realities that health care professionals do not like their authority or "orders" to be challenged, and their desire for substantial incomes; nor is it entirely the conflict between serving patients, serving the corporation, and serving a specific population. The greatest danger of euphemism is how we come to think of ourselves, of those who are ill, and of others in general.

Both managed care and downsizing are based on a cynical view of productivity, health, suffering, healing, and change. Prevention of sickness and suffering are not done primarily for the patient's good, but to increase profit for practitioner and corporation, and to keep the worker (not patient, not person) productive. All identity narrows to "worker"; other identities are dispensable. Managed care and downsizing are linked ideologies according to which the only good is short-term productivity and profit. *People's health or safety are at best a means toward that end.* This is the opposite of the Kantian ideal. Ironically, it sounds more and more like the "collective farm" of the former Soviet Union, which system the West ostensibly defeated in 1990. In managed care, both treatment and prevention are done for the wrong reasons (to keep the workhorses healthy), and downsizing is already proving nationally to be demoralizing and far less profitable than predicted.

Implicit in the doctrine on which downsizing and managed care rest is the view that people are good only for the production of wage-paying work. Entitlement to health benefits comes only through wage-work. That is, people are worthwhile only if they are young, healthy, and cost little to provide for, which is to say, exploitable and readily disposable as workers. "Patient" becomes "consumer" or "customer," but also "worker" and "workforce." Maxim Gorki wrote bitterly in his 1906 play, *The Lower Depths* (Act 3), "If you estimate men by work, then a horse is better than any man. He pulls a wagon—and holds his mouth about it" (p. 70).

The world of managed care and downsizing—despite the promises and lures of billboards and euphemisms—is one of created scarcity, lovelessness, indifference, and silent brutality, all couched in the language of competitive business necessity. Far from being the driving force of all cultural values, business and economics express and implement values, conscious and unconscious conflicts, beliefs, attitudes. "Bottom line" thinking rests upon group-shared assumptions of what and who counts in life—and what and who do not count. Violence is more committed by omission than commission. And euphemism serves as one of the chief rationalizers and enforcers of that violence. For the sake of corporate competitiveness and survival, anything and anyone can be sacrificed.

To draw on the work of historian Raul Hilberg, perpetrators, victims, and bystanders are all part of a single dance of death—in our case, by computer spreadsheet. No one's name makes it to the protected safety of a Schindler's List. There is no magnanimous industrialist executive Osk-

ar Schindler (or a Daddy Warbucks, as in the musical *Annie*) to protect us. Even ostensibly "covered lives," insured by the workplace, are highly exposed, because less and less is covered. Workplaces want products and producers, not real people. Even the CEO who today fires thousands to "save" the company or to show immediate profit, could well be fired tomorrow by shareholders or ousted in a corporate raid. No one is safe from the maw of a corporate Moloch. No amount of sacred sacrifice will suffice. Even "covered lives" are at risk for being uncovered, naked in the cold of our contempt for all weakness and suffering.

Violence against others will not suffice—we will destroy ourselves. If the enemy is "them," it is also "us." We hedge our bets against death through wage-employment. But not even diligent work will make us free. At best it will buy a little time. With the end of the Cold War, we all live in Bosnia now. If I may borrow from the metaphor of biomedicine: We will treat right only if we diagnose right. And *the subject of managed care and downsizing is the fantasized magical conquest of death through the idiom of business.*

To wake up from our destructiveness and self-destructiveness, we must first discern our solutions to be the problem, and the language of our solutions to be dangerous self-deceptions. Then we must face the sanitized horror from which no one is exempt, and acknowledge the motives behind the smokescreen of euphemism. If American biomedicine is to become person-oriented, community-oriented, and truly strive to relieve suffering rather than to turn a contemptuous, blind eye to it, its practitioners and administrators must begin by not inflicting it, by knowing why we wish to make others suffer, and not indulge ourselves.

Managed care and downsizing, together with the language of euphemism that serves them, are monuments to our attempt to disavow what we already know about our common destiny. The beginning of our cultural wakefulness is repentance and the acknowledgment of our common vulnerability in the human condition. For one day, we all will be patients. One day, we all will die. There are no exceptions. ▯

The Author

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Mortality Among Oklahoma Women and Selective Chronic Diseases

Rebecca Arnold, MPH; Adeline Yerkes, RN, MPH

Today, the average woman in Oklahoma will live 80 years. Although, her life expectancy is long, her quality of life may be comprised. Oklahoma women face chronic disease morbidity and mortality in an excess to women in other states across the nation. This article will discuss major chronic diseases and the subsequent mortality among women in Oklahoma for years 1993 through 1995.

Age-Adjusted Mortality Data

Mortality data, or death statistics, are commonly used to describe disease burden within populations. Mortality data is derived from determining the number of deaths that occur within a given population over a certain time period. Mortality data is most often reported as an average standardized age-adjusted rate. It is often useful to combine several years of data into an average rate. This adjusts for the effects of unusually small or large numbers of deaths occurring within a specific population in a given year. By using a standardized age-adjusted rate, one can eliminate the effects of age within a population, thereby allowing different populations to be compared. Additionally, data can be stratified based on demographic variables, such as sex, race, location, and cause.

Mortality data are used to aid public health professionals in appropriately identifying the diseases and conditions most commonly associated with death, thereby preparing for public health prevention programs, health systems, and/or delivery of services. By analyzing and publicizing mortality data, support can be gained for programs designed to prevent or control these diseases. Mortality data help to define and identify target populations that may deserve more focused prevention efforts.

Lung Cancer

Oklahoma ranks tenth in the nation for lung cancer mortality (Office on Smoking and Health, CDC). The 1993-1995 average age-adjusted respiratory cancer mortality rate for Oklahoma females is 42.3/100,000 (Fig. 1). Lung cancer comprises 97% of all respiratory cancer deaths. The national average is 25.6/100,000 females. Just sixteen of seventy-seven counties in Oklahoma have mortality rates equal to or lower than the national average. Five Oklahoma counties—Pushmataha, Latimer, Seminole, Murray, and Roger Mills—have lung cancer mortality rates that are at least 218% greater than the national average. Additionally, there are twenty-nine counties that are significantly higher, at 159% to 217% of the national average. Lung cancer accounts for 25% of all cancer deaths annually in the United States, thus, making it the leading cause of cancer mortality among women, as well as men. The US ranks twelfth among fifty countries for male lung cancer mortality, and fourth for female lung cancer mortality. The highest rate of lung cancer for males occurs in Belgium (77.2/100,000) and the lowest rate occurs in Thailand (5.5/100,000), while for females, the highest rate occurs in Scotland (27.1/100,000) and the lowest rate occurs in Thailand (2.0/100,000) (Cancer Rates and Risks, 1996).

Several national and international studies have shown a causal link between cigarette smoking

and cancer of at least eight major sites (Cancer Rates and Risks, 1996). Cancers of the lung, larynx, oral cavity, and esophagus have been identified as strongly linked with cigarette smoking. Risks of mortality from cancers of the bladder, kidney, pancreas, and cervix are shown to be substantially elevated. Additionally, several reports indicate an association between smoking and cancer of the stomach, liver, prostate, colon, and rectum. Cigarette smoking increases the risk of lung cancer more than 2,000% for males, and 1,200% for females. Smoking has also been linked to cerebrovascular disease and coronary heart disease. If an individual discontinues cigarette use, their risk for mortality associated with cigarette smoking will decrease by nearly fifty percent within the first year of cessation (Cancer Rates and Risks, 1996).

Public education efforts promoting awareness of the adverse effects of smoking have succeeded in decreasing the prevalence of smoking. However, this decline is more prominent among males than females. A 1990 population survey conducted by the Oklahoma State Department of Health and the Centers for Disease Control and Prevention revealed that Oklahoma ranks number one in the nation for the percentage of females ages 35 to 64 who smoke. Of the fifty states and the District of Columbia, Oklahoma was one of only two states to report a higher percentage of female smokers (35.4%) than male smokers (31.8%).

Breast Cancer

The average age-adjusted breast cancer mortality rate for Oklahoma females is 22.2/100,000 (Fig. 2). This rate is nearly equal to the national average of 22/100,000. However, this finding is diminished by examining the twenty-year trend (1970-1990) for breast cancer mortality. Nationally, the mortality rate has remained relatively steady, with only a slight 3% increase. In comparison, Oklahoma has observed a 12% increase. Oklahoma's increased mortality could be partially attributed to the increased aging population, as well as the increased screening rates observed in the 1980s. Regionally, most of the deaths are clustered in the central region of the state. Again, this could be a result of increased screening due to a larger number of awareness programs and mammography facilities. There are two counties in Oklahoma that have mortality rates that greatly exceed the national average—Harper County (38.3/100,000) and Okfuskee County (40.9/100,000). There are eleven counties that significantly exceed the national average, with rates between 130% and 157% that of the national average. Internationally, the US ranks sixteenth among fifty countries for breast cancer mortality. England and Wales have the highest breast cancer mortality rate (29.3/100,000). Asian countries have the lowest rates (China: 4.7/100,000, Korea Republic: 2.6/100,000, Thailand: 1.0/100,000) (Cancer Rates and Risks).

The average lifetime risk for developing breast cancer is one in eight for all US females, with a 1 in 28 lifetime risk of mortality. The relative risk for breast cancer morbidity and mortality increases with the addition of one or more known risk factors. The most important risk factor for developing breast cancer is increasing age. For example, a 20-year-old woman has a 1 in 2,500 chance of developing breast cancer. By age 30, this risk has increased to 1 in 233; and at age 60 the risk is 1

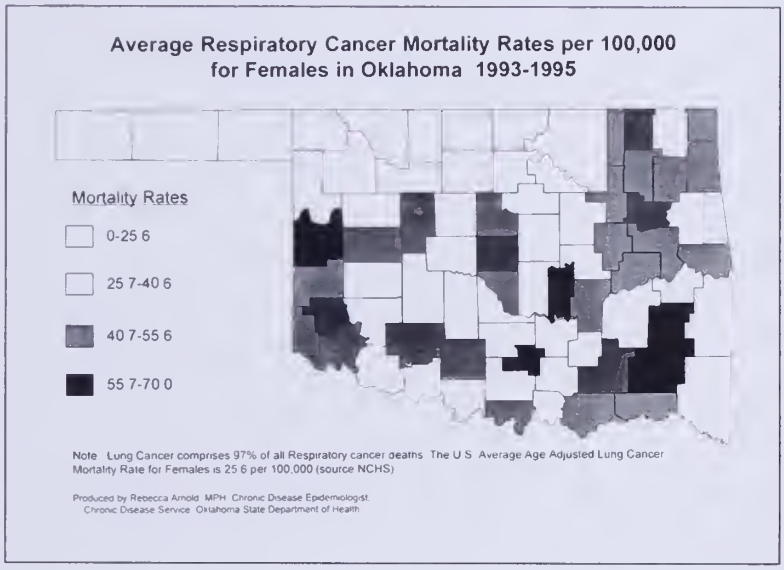


Figure 1.

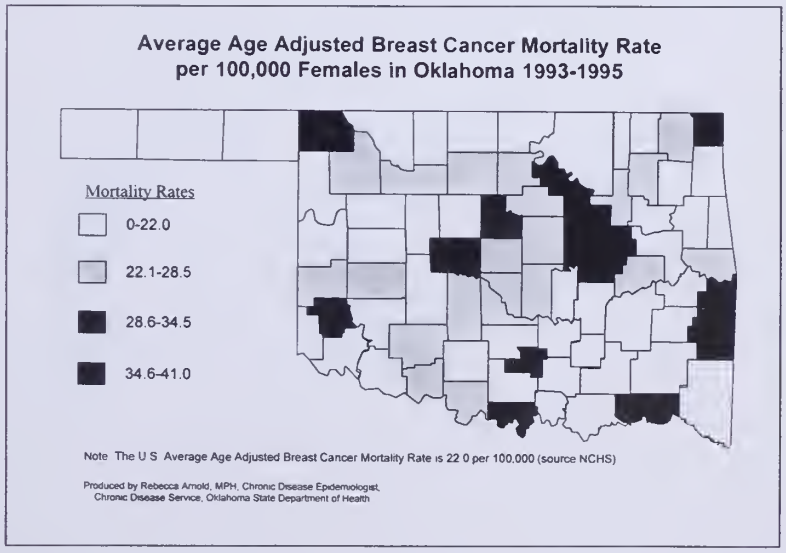


Figure 2

Oklahoma Women *(continued)*

in 29 (ACS). Additional risk factors include family history, personal history, a history of benign breast disease, and hormonal factors. The association of additional risk factors such as diet and alcohol consumption, exercise, and pregnancy history are being examined.

Currently, the single most effective way to screen for breast cancer is mammography. Mammography has the ability to detect lumps suspicious for breast cancer much earlier than either clinical breast exam or self breast exam. The sensitivity of mammography, or its ability to correctly detect the presence of cancer, is between 76% and 94%. This is higher than the sensitivity of both clinical breast exam (57% to 70%) and self breast exam (20% to 30%). Additionally, the specificity, or the ability to correctly identify when cancer is not present, is 90% (ACS). Studies have shown that breast cancer mortality can be reduced by as much as 30% in women over 50, and by as much as 15% to 20% in women ages 40-49 (NIH Consensus Conference). Currently, the National Cancer Institute and the American Cancer Society recommend that women between the ages of 20 and 39 should perform self breast exams monthly and have a clinical breast exam every three years. Women age 40 to 49 should perform monthly self breast exams and have annual clinical breast exams in addition to a baseline mammogram by age 40 and every one to two years thereafter. Women age 50 and over should perform monthly self breast exam as well as having an annual mammogram and clinical breast exam.

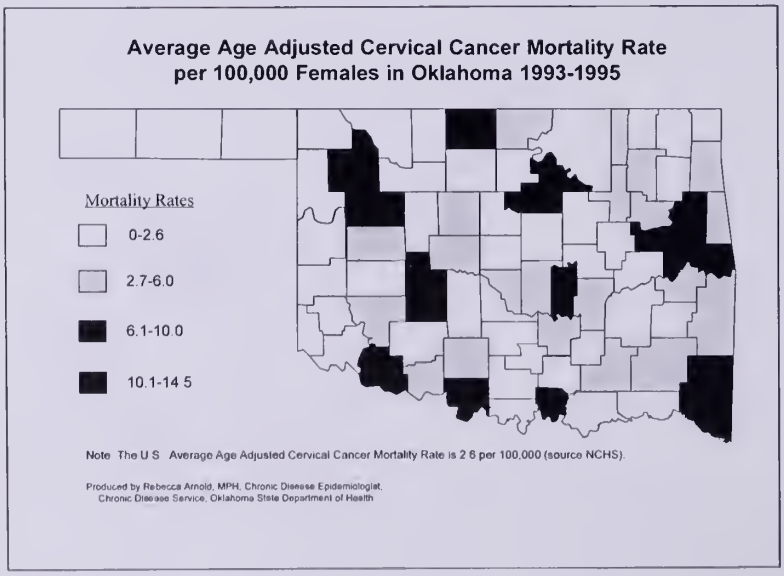


Figure 3.

The 1992 Cancer Control supplement of the National Health Interview Survey (NHIS) showed that only 68% of women aged 40 and over reported ever having had a mammogram, with only about one-third reporting a mammogram within the past year (ACS). In women aged 50 and older, only 30% reported having had a mammogram within the past year. Oklahoma Behavioral Risk Factor Surveillance (BRFSS) data show that slightly more than 50% of women reported having had a mammogram and a clinical breast examination within the past two years (OSDH). The decision to have routine mammography seems to be influenced by such factors as education and income. Additionally, data from the NHIS revealed that having a regular source of medical care tends to increase the prevalence of routine mammography. Therefore, prevention and screening efforts should target older women who are socioeconomically disadvantaged.

Cervical Cancer

Oklahoma ranks fifteenth nationally for cervical cancer mortality with a rate of 3.0/100,000 (Fig. 3) The US rate is 2.6/100,000. Although this may seem like a small number of deaths, averaging only sixty per year in Oklahoma (OSDH Vital Statistics), cervical cancer deaths are 99% preventable. Five counties in Oklahoma—Dewey, Caddo, Seminole, Marshall, and Cherokee—have mortality rates that are 388% to 558% that of the national average. There are nine counties that significantly exceed the national average, ranging from 2 to nearly 3.8 times greater. Internationally, the US ranks thirty-seventh out of fifty countries for cervical cancer mortality. Mexico has the highest rate, 14.7/100,000; and Thailand has the lowest rate, 0.6/100,000 (Cancer Rates and Risks).

Prevention of cervical cancer can be attained by increasing the prevalence of Pap smear tests in all women who are sexually active or over age eighteen. There are several known risk factors associated with cervical carcinoma in situ (CIS) and invasive cervical cancer. The strongest association exists with sexual behavior. Studies show that women who have first intercourse at an early age, multiple sexual partners, or partners who have had multiple sexual partners are at increased risk of developing cancer (ACS). Sexually transmitted diseases, such as human papillomaviruses (HPV) and herpesviruses, have also been linked with increased risk of cervical cancer. These viruses may increase cervical cancer risk, but are not a necessary and sufficient cause (Cancer Rates and Risks).

The BRFSS data indicate that about 85% of women aged 18 and older in Oklahoma have had

a Pap smear within the past three years. The rate is highest among women aged 25 to 34 (92.8%), and decreases steadily with age. The lowest screening rates are reported for women between 55 and 64 (73.4%) and for women 65 and older (67.5%). Differences in screening prevalence are also identified for various levels of education. Those with less than a high school education report a 75% prevalence, while those who are college graduates or higher report a 92% prevalence of screening within the past three years. As expected, based on educational patterns, screening prevalence also increases with increasing income, reaching a 94% prevalence with income levels of $50,000 or higher.

Cardiovascular Disease

Cardiovascular disease is the leading cause of death and disability for both men and women. One in nine women will have some form of cardiovascular disease between the ages of 45 and 64 years of age and after 65 years the ratio increases to one in three women. It has been estimated that 36% of women ages 55 to 64 years of age and some 55% of women 75 years of age and older are disabled by coronary heart disease (Eaker, et al, *Circulation*, 1993).

Oklahoma ranks 12th in the nation for overall cardiovascular disease mortality among women. Nationally, heart disease and stroke rates have declined by 24% in the last two decades, whereas in Oklahoma there been little to no decline. The decline nationally is greater for men than for women, although the death rate is still higher for men. Although Oklahoma stroke death rates have declined, rates are still 20% higher than the national average. From 1993 to 1995, the average age-adjusted death rate for cardiovascular death among women in Oklahoma was 217.19 per 100,000 as compared to the national rate of 135.6/100,000 (Fig. 4). Significant in Oklahoma is that only two counties have average age-adjusted cardiovascular deaths at the national level or below. Of the seventy-seven (77) counties, 50 counties have higher rates than the national average, 24 counties have significantly higher rates than the national average, and one county has a rate that greatly exceeds the national average. Haskell County has an average age-adjusted cardiovascular rate of 399/100,000 compared to the national rate of 135.6/100,000 (Oklahoma Vital Statistics) (NCHS, 1993).

The Framingham Heart Study, initiated in the 1940s and continuing today, identified risk factors for cardiovascular disease in the community setting. This ongoing study, which recruited men and women 30 through 62 years of age shows that on the average, women develop symptoms of heart disease a decade later than men. Although the incidence of coronary heart disease is three times higher in men than in women from the ages of 45 through 54 years, the gap narrows, and by age 70, the incidence is essentially the same. Women in the Framingham Heart Study who are 55 years of age and older have a tenfold higher risk of coronary heart disease than women ages 35 to 54. Risk factors for cardiovascular disease are similar for both men and women: cigarette smoking, uncontrolled hypertension, increased levels of serum cholesterol, sedentary lifestyle. Other related risk factors include diabetes and surgically induced menopause without follow-up hormone replacement therapy (Lerner, et al, *Am Heart Jrn*, 1986) (Pinsky, et al, *Am J PH*, 1990).

Diabetes

Diabetes as a disease has been increasing in both morbidity and mortality. In 1995, diabetes was the only chronic disease to have an overall national increase in mortality. In Oklahoma, the average age-adjusted rate for diabetes for Oklahoma women was 20.6/100,000 in comparison to 17.0/100,000 nationally (Fig. 5). Diabetes mortality varies by region in Oklahoma with Northwest having the highest modality rates.

Diabetes prevalence in Oklahoma is 4.3%, which is higher than the national average of 3.9%. Diabetes is higher in women than in men, with a rate of 4.5% for women and for men a rate of 3.1%. The prevalence rates are higher for minorities; the highest prevalence rate regionally is Southeast Oklahoma. The prevalence rates of diabetes are misleading as some one-half of persons with the diseases do not know they have the

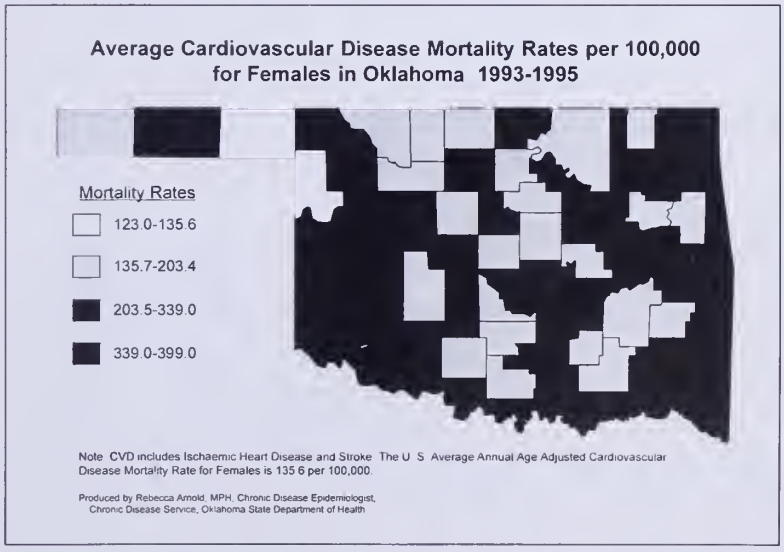


Figure 4.

Oklahoma Women *(continued)*

disease or have been told they have "borderline diabetes." Some 900,000 Oklahomans are at risk of developing diabetes due to the risk factors associated with diabetes. Risk factors associated with diabetes include age, sedentary lifestyle, obesity, and race [whites (3.1%), African Americans (6.4%), Hispanic (4.7%), and American Indian (6.8%)]. Diabetes is an association risk factor for cardiovascular disease. Some 60% to 70% of all persons with Type II diabetes have comorbidity of hypertension (BRFSS, 1995).

Diabetes as an increasing disease can be directly associated with the high rates of sedentary lifestyle in Oklahoma. Sixty percent of Oklahomans do not exercise regularly.

Discussion

The First Lady, Cathy Keating, has initiated the Oklahoma Women's Health Network. The Network is a statewide partnership of community leaders dedicated to increase awareness of key women's health issues for maturing women. The issues are: cardiovascular disease, breast and cervical cancer, osteoporosis, depression, and menopause. The Oklahoma State Medical Association is a key partner. During the Annual Meeting of the OSMA House of Delegates in April 1997, the delegates passed a resolution to support the mission and effort of this Network. The resolution is as follows:

"Women's Health"

Whereas, the Oklahoma average age adjusted Cardiovascular Disease Mortality rates for females for 1993-1995 is 217.2/100,000 and which is significantly higher than the US rate of 135.6/100,000; and

Whereas, the Oklahoma average age adjusted Respiratory Cancer Mortality rates for females for 1993-1995 is 42.3/100,000 and which is significantly higher than the US rate of 25.6/100,000; and

Whereas, the Oklahoma average age adjusted Cervical Cancer Mortality rates for females for 1993-1995 is 3.0/100,000 and which is significantly higher than the US rate of 2.6/100,000; and

Whereas, the Oklahoma average age adjusted Breast Cancer Mortality rate for females for 1993-1995 is 22.2/100,000 and is above the US rate of 22.0/100,000; and

Whereas, the Oklahoma average age adjusted Diabetes Mortality rate for females for 1993-1995 is 20.6/100,000 is above the US rate of 17.0/100,000; and

Whereas, many Cardiovascular Disease, Respiratory Cancer, Breast Cancer, Cervical Cancer, and Diabetes deaths among Oklahoma women are premature and preventable deaths; and

Whereas, these deaths are costly to Oklahoma in productive families, in quality of life for middle years women, and in utilization of health care system resources; now therefore be it

Resolved, that the Oklahoma State Medical Association develop a collaborative relationship with First Lady Cathy Keating's Initiative and the Oklahoma Women's Health Network to further the mission of the network to promote, educate, and heighten awareness of women's health issues statewide; and be it further

Resolved, that the Oklahoma State Medical Association educate and raise the awareness of the total population concerning diseases, prevention, risks, treatments for cardiovascular disease, cervical, breast and lung cancers, diabetes, depression, osteoporosis, and menopause by collaborating with the Network in developing a statewide awareness campaign, and be it further

Resolved, that the Oklahoma State Medical Association raise the awareness of women's health issues among health care professionals by collaborating with the Network and the Women's Health Committees of the Oklahoma State Medical Association, and by offering a speakers bureau on women's health; and be it further

Resolved, that the Oklahoma State Med-

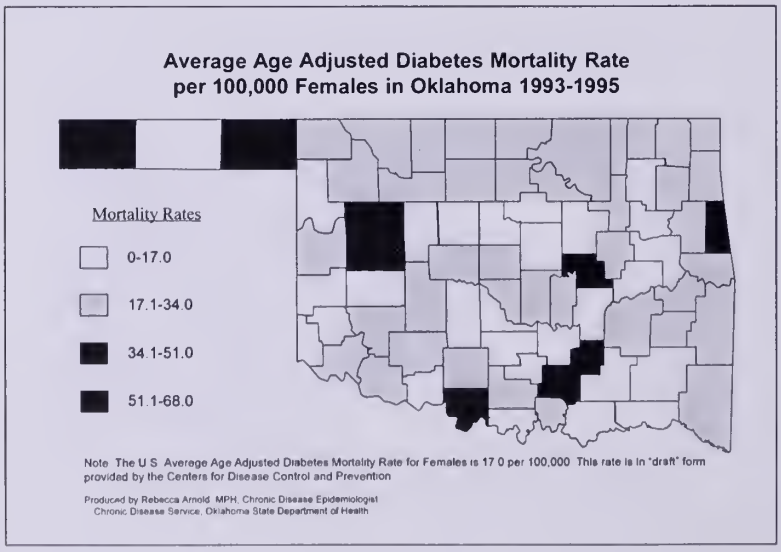


Figure 5.

ical Association collaborate with the Network in providing resources and services availability throughout the state of Oklahoma; and be it further

Resolved, that the Oklahoma State Medical Association promote healthy living choices among women served; and be it further

Resolved, that the Oklahoma State Medical Association support the Oklahoma Consortium for Improving the Health of Oklahomaons (OCIHO), whos Mission Statement is to improve the State of the State's Health by facilitating a reduction in disease, disability and premature death compared with the rest of the nation.

Women are utilizing this mortality data to develop community forums, walks, health fairs, and other efforts to increase awareness and empower women to take action. Women are being challenged to take action through the prescription of prevention for a healthy quality lifestyle (Fig. 6). Join this effort by prescribing healthy living for Oklahoma women.

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PUT PREVENTION INTO PRACTICE

Name: _____ Date: _____

Rx for 10 Steps to
Positive Women's Health and a Quality Life

1. Exercise 30 minutes a doy by vacuuming, gardening, walking, swimming or the exercise of your choice to prevent heart disease, diabetes, concers, or osteoporosis.
2. Take 1500 mg of colcium daily to prevent osteoporosis.
3. Eat 5 servings of either fruits or vegetables, drink 1% milk, and eat 3 oz. of leon meat daily to prevent heart disease, cancers, diabetes or osteoporosis.
4. Perform Breast Self-examinotions monthly.
5. Wear sun screen, o hat, and protective clothing to prevent skin cancers ond early wrinkles.
6. Stop smoking if you do and prevent heort disease, strokes, osteoporosis, lung, breast, cervical, ond skin cancers.
7. Hove an annuol physicol examination with the health care provider of your choice.
8. Hove an annuol pelvic examination with Pap smear to find eorly cervical concer.
9. Hove an annuol clinical breast examinotion to find early breast cancer.
10. At 40 years of oge, have o boseline mommogram, at 50 years of age start having yeorly mammograms to find early breast cancer and have a baseline bone density test to find osteoporosis in the eorliest stages.

Follow-up: Visit me next year on _____

Signature: _____
(Physician Signature)

Figure 6. The prescription of prevention for a healthy quality lifestyle.

American trypanosomiasis: Chagas disease an emerging zoonotic threat in Oklahoma?

American trypanosomiasis, commonly called Chagas disease, is a serious zoonosis endemic in most of Latin America affecting 16 to 18 million people, with an estimated 43,000 deaths attributed to the disease annually [WHO data, 1995]. Chagas disease is caused by infection with *Trypanosoma cruzi*, a protozoan blood parasite (Fig. 1). *T. cruzi* has a complex life cycle involving an insect vector (Order: *Hemiptera*, Family: *Reduviidae*, Fig. 2), numerous mammalian reservoirs, and a long latency of infection. Most people who are infected do not develop acute signs of disease, but have lifelong parasitemias. Of those infected, 10% to 30% develop chronic Chagas

American trypanosomiasis *(cont.)*

disease, which is usually characterized by cardiomyopathy, cardiac dysrhythmias, or gastrointestinal dysfunctions. Nifurtimox and benznidazole are drugs used to treat persons in the acute stages of Chagas disease; however, adverse drug reactions are frequent and a parasitological cure may not be achieved.[1]

Several modes of transmission of *T. cruzi* are possible. Naturally acquired transmission is generally vector borne. By an infected reduviid bug discharging its feces containing trypanosomes onto a fresh bite wound or mucous membrane surface, infection of an animal or a human can be introduced. Congenital transmission and transmission by blood transfusion from an infected blood donor is not uncommon in endemic countries. In the United States, the most recognized mode of transmission is occupational exposure in a laboratory setting. Over 45 accidental, laboratory-acquired cases of Chagas disease have been reported to the Centers for Disease Control and Prevention (CDC).[2] In comparison, only 5 indigenous acute vector borne human infections have been reported to date.[3]

Animal Infections

In Latin American countries where Chagas disease is endemic, dogs are known to be important reservoirs of infection. Accounts of canine trypanosomiasis in the United States have been sporadic, but seem to be appearing with increasing frequency in the literature. In 1982, the first documented case of naturally occurring trypanosomiasis in a dog from Oklahoma was made.[4] In September 1996, acute *T. cruzi* infection was diagnosed in a four-month-old mastiff puppy at the OSU Boren Veterinary Medical Teaching Hospital. The puppy had originated from a breeder in Nowata County. Further investigation revealed one other littermate to be similarly infected. Two serologically diagnosed cases in coonhounds in LeFlore County were also recently identified.

In addition to vector borne and congenital transmission, dogs can be infected with *T. cruzi* by ingesting infected reduviid bugs, or the tissues of an infected wild animal. Over 150 different animal species have been found to be infected with *T. cruzi* [3] with the opossum, raccoon, armadillo, skunk, and woodrat considered as the most common sylvatic animal hosts in the southern United States. Hunting dogs appear to be more frequently infected with *T. cruzi*.

Because of the potentially serious consequences of this zoonotic disease, there is heightened concern about the public health implications surrounding the recognition of this disease in canine pets. Dogs infected with *T. cruzi* can have subclinical infections and a persistent low-level parasitemia which can provide a reservoir of infection for vectors, future litters, and conceivably, also for their human companions. With two of the recent canine cases, there was legitimate concern about possible human exposure to infected blood and lymph tissue, including a needlestick injury, leading to the serological monitoring of a total of 15 persons.

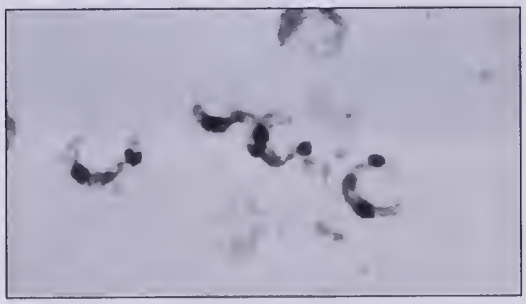


Fig. 1. *Trypanosoma cruzi,* a protozoan blood parasite parasiteparasite



Figure 2. *T. cruzi* involves an insect vector (Order: *Hemiptera,* Family: *Reduviidae.*

Vectors

Records of the reduviidae of Oklahoma are quite sparse, but *Triatoma sanguisuga* and *Triatoma lecticularius* have been documented to be distributed in Oklahoma.[5] It is likely that other blood-sucking reduviid species hold an ecological niche in the state. Vector surveys in other southern states have revealed *T. cruzi* infection rates in triatomids to range as high as 64%.[6] Because differences in aggression, host preference, potential for domiciliary adaptation, and defecation behaviors between triatomine species are of epidemiologic importance, it would be helpful to have a more complete understanding of which insect vectors of *T. cruzi* inhabit Oklahoma.

Blood Supply

Presently, no national screening method of the blood supply for *T. cruzi* exists. The eligibility

criteria for blood donors currently in use are designed to protect the blood supply from malarial parasite contamination, but those criteria do not address *T. cruzi* contamination due to the lifelong carrier state for Chagas disease. An increasing number of immigrants from countries endemic for American trypanosomiasis are moving into the United States. As our immigrant Hispanic population expands, there is increased likelihood of donation of *T. cruzi*-contaminated blood. An epidemiologic study in Washington, D.C. revealed a 5% *T. cruzi* infection rate in Central American immigrants.[7] Moreover, transfusion-associated transmission of *T. cruzi* in the United States and Canada has been reported. [8,9]

Planned Research

Probably few physicians, veterinarians, and other health care professionals are aware that *T. cruzi*-infected animal hosts and a suitable insect vector for Chagas disease are present in Oklahoma. To evaluate the potential public health risk of this zoonosis in Oklahoma, a two-year study initiated through the Acute Disease Service, Oklahoma State Department of Health to research the prevalence of *T. cruzi* in dogs, triatomine vectors, and the state's blood supply is planned. Funding for the study has been obtained from an Oklahoma Center for the Advancement of Science and Technology (OCAST) Award and was scheduled to begin June 1, 1997. Kristy K. Bradley, DVM, MPH, and J. Michael Crutcher, MD, MPH, are co-investigators of this research study. Entomological support for the project will be provided by Drs. Stephen Wikel and Doug Bergman, Department of Entomology, Oklahoma State University. Louis V. Kirchhoff, MD, MPH, College of Medicine, University of Iowa, has committed his collaboration and laboratory support.

—Kristy K. Bradley, DVM, MPH
Epidemiologist
Communicable Disease Division, OSDH

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Oklahoma's Central Cancer Registry now in operation

The Oklahoma Central Cancer Registry is a central database of information on all cancer diagnosed or treated in Oklahoma since January 1, 1997. Oklahoma law establishing the statewide registry within the Oklahoma Department of Health was signed in 1987, and federal funding to plan and implement the registry was obtained in late 1994. January 1, 1997, is considered Oklahoma's reference date. The first annual report of the registry's outcomes will be published reflecting 1997 cancer reporting by July 1, 1998.

This statewide registry enables policymakers, researchers, and consumers to obtain incidence, prevalence, and survival information. The information maintained by the registry on all reported cases allows the Health Department to study cancer trends and develop prevention and control efforts based on the data. Currently, cancer prevention and control efforts are based on mortality data and national trends. The American Cancer Society estimates that Oklahoma has between 14,500 and 15,000 cases of cancer annually.

State law requires all health care facilities and physicians to report to the Oklahoma Cancer Registry information on all cases of cancer that are diagnosed or treated in Oklahoma. Health facilities include hospitals, free standing surgery, treatment or mammography facilities, and laboratories. Certain types of basal cell cancers are not reportable. Through special interstate agreements, information of Oklahomans diagnosed or treated in neighboring states is also included in Oklahoma's registry The registry does not and will not collect information directly from patients.

The registry collects data in four categories:

Demographic which includes the cancer patient's name, age, sex, race, ethnic background, marital status, residence, and occupation;

Administrative which includes the date the

Central Cancer Registry (continued)

cancer was diagnosed and the source of the information, such as the facility and physician name;

Diagnostic includes the histology of cancer, the cancer site, the size of the cancer and the spread of the disease. All cancer will be reported as staged by TNM methodology; and

First Course of Treatment, subsequent courses of treatment, recurrence, and other pertinent follow-up data.

Reporting will be conducted through automated hospital tumor registries and laboratories submitting data through diskette or other electronic transmission. Facilities and physicians not having automated capabilities will submit by a paper abstract. Each facility will determine which system provides the most complete, timely, and accurate reporting. Physicians are responsible for determining whether facilities and laboratories with which they are affiliated are reporting cancer cases. Those cases not being reported are the physician's responsibility. Oklahoma's abstract is based on national standards of abstracting and common data elements adopted by the American College of Surgeons, National Cancer Registrars Association, the Association of Central Cancer Registries, and the Centers for Disease Control and Prevention.

The Oklahoma Central Cancer Registry (OCCR) will maintain quality standards. These standards include measures of timeliness, completeness, accuracy, and quality.. Timeliness includes having cases reported to OCCR within 180 days of diagnosis. Quality includes 100% accuracy of reporting both in cases reported as well as data collection. Completeness includes reporting all cases described by law and completeness of the abstract data elements.

Oklahoma's law specifies that the Commissioner of Health shall protect the identity of the patient and physician involved in any reporting and may not release their identity without written consent, The Commissioner may grant any person involved in a legitimate research activity access to confidential information obtained by the Department concerning individual patients if:

(1) the research activity is determined to be in the interest of public health and

(2) the person conducting the research provides written information about the purpose of the research project, the nature of the data to collected, and the methods of analysis.

The Oklahoma Central Cancer Registry staff will conduct epidemiological studies and analysis. Types of analysis will include geographical, temporal, demographic, survival, cluster, incidence, and prevalence. Comparisons will be conducted regionally and nationally.

Registry staff are utilizing a central cancer registry software program which conducts edit checks, reduces duplication of cases reported and performs certain auditing functions. The staff have developed a statewide procedural manual for abstracting and reporting which has been disseminated through regional workshops and mailings. A continuous quality improvement process has been developed to measure the standards of the program, program processes, outcomes of timeliness, accuracy and completeness by reporting facilities.

For more information about the registry and its functions, abstracting procedures, reporting process, and obtaining abstract forms, contact the Oklahoma Central Cancer Registry at 405-271-4072. Staff members are available for consultation, training, and assistance with determining appropriate registry software. Please contact the Oklahoma State Department of Health, Chronic Disease Service, and ask for Adeline Yerkes, RN, MPH, chief of the Chronic Disease Service, or Debbye Payton, CTR, Coordinator, Oklahoma Central Cancer Registry.

Newborn Metabolic Disorder Screening Program: Sickle Cell Disease and Other Hemoglobinopathies

Joan Parkhurst, MD, Pediatric Hematologist

Children with hemoglobinopathies have inherited one or more genes that code for abnormal globin chains within the hemoglobin molecule. If one abnormal gene is inherited, the patient has a trait or carrier state and is usually asymptomatic. The most common trait conditions are sickle cell trait and hemoglobin C trait, which occur at rates of 1:16 and 1:47 respectively among the African-American population in Oklahoma.

If the patient inherits abnormal genes from both parents, he or she is not able to make any normal hemoglobin and has a disease state. The most common examples of this are sickle cell anemia (hemoglobin SS disease) and hemoglobin SC disease, which occur at respective rates of 1:444 and 1:905 African-American births in Oklaho-

ma. In sickle cell disease and its variants, the patient may experience episodes of severe pain when abnormally shaped red blood cells block small capillary vessels causing infarction. In addition, this process may cause long-term damage to several organ systems. Of particular concern is the damage to the spleen, which early in life affects the patient's ability to deal with encapsulated organisms. Early institution of penicillin prophylaxis helps prevent pneumococcal sepsis, which has historically been the leading cause of death in children with sickle cell disease in the United States.

Currently, 44 states screen newborns for sickle cell disease. In Oklahoma, the Newborn Metabolic Disorder Screening Program (NMDSP) contacts the physician with recommendations for follow-up testing on all abnormal hemoglobins. Presumptive positives for sickle cell disease require confirmatory whole blood hemoglobin electrophoresis testing within 72 hours, trait or carrier conditions require confirmatory testing at 3 to 4 months of age. Confirmatory testing is a service provided by the NMDSP Laboratory. The NMDSP recommends any infant confirmed with sickle cell disease be referred to a pediatric hematologist for comprehensive medical care.

Fever Alert: Children with sickle cell disease should be considered functionally asplenic and are consequently more susceptible to certain bacterial infections. Daily penicillin prophylaxis significantly reduces morbidity and mortality, and should be given prior to 2 months of age and continued until 5 years of age.

Septicemia due to *Streptococcus pneumoniae* or *Haemophilus influenzae*, type B, is the most common cause of death in young children with sickle cell disease. Anytime a child with sickle cell disease has a temperature of 101°F or greater, they require prompt physical assessment, a blood culture, and an initial dose of intravenous antibiotics. To prevent mortality, a febrile child with sickle cell disease should never be sent home without proper treatment. For further information regarding treatment recommendations, consult the *Fever Management Guidelines for Infants and Children with Sickle Cell Anemia and Other Related Hemoglobinopathies*, or with a pediatric hematologist. For a copy of the Fever Management Guidelines, please contact the NMDSP Follow-up Program at (405) 271-6617 or 1-800-766-2223, ext. 6617. For pediatric hematologist referral or consultation information, please call the following specialists in your area: Joan Parkhurst, MD, Oklahoma City, (405) 271-5311 or Greg Kirkpatrick, MD, Tulsa, (918) 494-2525.

Newborn Metabolic Disorder Screening Program Confirmed Cases 1991-96

Disease	1991	1992	1993	1994	1995	1996	Total
Hemaglabin SS Disease	11	8	9	14	13	2	57
Hemoglobin SC Disease	7	3	5	6	6	3	30
Hemoglobin C Diseose	0	4	1	1	0	2	8
Sickle Beto Thalassemia	0	1	2	0	1	1	5
Hemaglabin E Disease	0	0	0	0	1	1	2
Sickle Cell Trait (initial filter paper screen)	331	433	435	436	338	422	2,445
Hemoglobin C Trait (initiol filter paper screen)	86	139	144	128	144	134	775

Isolated Coses:
Hemaglobin C Beta *Thalassema, 1 case 1996
Hemaglobin O Disease, 1 case 1994



Seventh graders must have hepatitis B vaccine for school

Students entering 7th grade the fall of 1997, and those entering kindergarten the fall of 1998, will be required to have the hepatitis B vaccine series (see chart). By law, students in Oklahoma can attend school if they are either up to date on their immunizations, in the process of completing the required vaccine series, or have a valid exemption on file (an exemption can be medical, religious, or personal in nature).

Historically, when a vaccine has been added to the list of school requirements, it was for kindergarten/1st grade entry. The rationale for selecting the 7th grade is based on the Advisory Committee on Immunization Practices (ACIP) recommendations for its inclusion in an 11- to 12-year-old health care visit; 7th graders are approaching adolescence, which is when most people contract hepatitis B; the drop-out rate for 7th graders is very low. Therefore, this strategy will provide protection for the largest percentage of a birth cohort prior to their entering a high risk period in their lives.

Hepatitis B infects 250,000 to 300,000 individuals each year. The majority of these cases are adolescents and young adults. Although hepatitis B is classified as a sexually transmitted/IV drug abuse disease, about 60% of adolescents who get hepatitis B do not participate in any high risk activities. Sharing razor blades, toothbrushes, nail clippers, a needle used for body piercing, or any object which could be contaminated with blood or body fluids can result in hepatitis B transmission. The hepatitis B virus can remain infectious on a dry surface for 10 to 14 days and is estimated to be 100 times more infectious than the AIDS virus. Further questions should be referred to the Maternal and Child Health Service, Immunization Division at (405) 271-4073.

Vaccines Required by School Year and Grade

Years	1 Dose of Measles and Rubella	2nd Dose of Measles	1 Dose of Mumps	3 Doses each of Polio and ETP	5 Doses of DTP & 4 Doses of Polio	3 Doses of Hepatitis B	3 Doses of Hepatitis B
1997-1998	K-12	K-7	K-10	2-12	K-1		7
1998-1999	K-12	K-8	K-11	3-12	K-2	K	7-8
1999-2000	K-12	K-9	K-12	4-12	K-3	K-1	7-9
2000-2001	K-12	K-10	K-12	5-12	K-4	K-2	7-10
2001-2002	K-12	K-11	K-12	6-12	K-5	K-3	7-11
2002-2003	K-12	K-12	K-12	7-12	K-6	K-4	7-12
2003-2004	K-12	K-12	K-12	8-12	K-7	K-5	
2004-2005	K-12	K-12	K-12	9-12	K-8	K-12	
2005-2006	K-12	K-12	K-12	10-12	K-9	K-12	
2006-2007	K-12	K-12	K-12	11-12	K-10	K-12	
2007-2008	K-12	K-12	K-12	12	K-11	K-12	
2008-2009	K-12	K-12	K-12	12	K-12	K-12	

'97 Annual Meeting Proceedings

REPORT OF THE PRESIDENT

Opening Session, OSMA House of Delegates, April 25, 1997

By David L. Harper, MD

The winds of change have blown through the Oklahoma State Medical Association in recent years. Change can be difficult, but many times is necessary and can lead to a better organization if it is used as an impetus to pull together. I want to thank the staff, Board of Trustees, and the active members of the OSMA for their help this past year in working as a cohesive organization and I would like to report to you on the present state of the Oklahoma State Medical Association.



Dr. Harper

The most immediate goal this past year was to put our own house in order, so that we could accomplish the business and mission of the OSMA. We needed to put behind us the arguing, bickering, and internal problems that have plagued the OSMA in recent years. With the time and efforts of the staff and the support of many active members this has been possible. We are truly moving forward together and working as one organization to accomplish our goals. It is healthy for our Association to have members with differences of opinion and different ideas, as long as we agree to an ultimate consensus to work for the improvement of the OSMA, its members, and our health care system.

The second immediate goal was to make the OSMA office more effective, more productive, and improve the work environment. With the changes in personnel, job descriptions, updated equipment, and assignments, we are well on the way to accomplishing this. We have an active and representative CEO Search Committee chaired by Dr. David Selby which presently is at work to find a new Executive Director to supply the leadership to help take our Association to a new and higher level of accomplishment. This will be a national search so that we can have the absolute best opportunity to find the right person for this important position.

Representation of physicians and patients on the legislative front is one of our most important jobs; we have made new efforts and commitments toward achieving that goal this year. We have a new Associate Director for Political Activities, Vickie Rankin, and she along with our new lobbyist, Lynne White, has been very active at the State Capitol during our present legislative session. As a result, the OSMA is having more success than ever and is seen as a potential political power on the state level. Dr. Ed Brandt and the Council on State Legislation and Regulation have continued their hard work on our behalf, and Dr. Dick Boatsman and the Council on Governmental Activities have been active representing us on the national level in Washington D.C. OMPAC has been more responsive to representatives and senators who have supported medicine and has a new program to track voting records and should be even more successful in the coming years in influencing our legislators. More and more physicians are participating in one-on-one activities with their own representatives and senators and this will pay dividends on a long-term basis. Legislative representation of physicians and patients for the betterment of our health care system should be an ongoing commitment of the OSMA.

We have instituted new and more detailed short and long-range planning to better delineate our goals and ways of achieving them. Dr. Mary Anne McCaffree is the present Chair of the Planning and Development Committee which helps guide us in this continuing effort.

PLICO continues to be one of the OSMA's greatest accomplishments thanks to a hard-working physician board and the continued support of OSMA members. PLICO continues to work to adapt to an ever-changing health care environment in Oklahoma, and is being proactive to keep our insurance company successful and the best bargain in the United States. We need to remember this is our insurance company controlled by us and run for our benefit.

We have joined forces with the Oklahoma Centralized Verification Organization with a goal of a uniform application process for hospitals and managed care organizations which ultimately could result in one re-credentialing re-

Report of the President *(continued)*

quirement every two years for all physicians. This endeavor, similar to the PROklahoma venture, is an effort to try to keep physician involvement as an element of physician control on our changing health care environment. These are difficult endeavors, with no guarantee of success, requiring commitment of time and money, but are attempts to keep portions of the health care system under our influence.

Although at times difficult, this year has definitely been a good one for the Oklahoma State Medical Association and ensuing years will be better. Your leadership is active, interested, and I predict it will continue to lead the OSMA to greater accomplishments. We are making more and better efforts to accomplish our mission of representing the patients and physicians of Oklahoma to improve our health care system for all.

Thank you for the honor and opportunity of serving as your President.

REPORT OF THE PRESIDENT-ELECT

Closing Session, OSMA House of Delegates, April 27, 1997

By David M. Selby, MD

The practice of medicine is a privilege. This privilege holds significant implications for all of us as members of the Medical Profession and particularly as members of the Oklahoma State Medical Association. As the officer elected to lead our Association for the next year, I am cognizant, and becoming more keenly aware each day, of the many facets involved with the privilege we enjoy as practitioners of medicine. It is imperative we fulfill our obligations and conduct our affairs in a manner which justifies this privilege and the confidence and trust placed in us by our patients—the People of Oklahoma.



Dr. Selby

For me personally, it is a privilege to follow in the very able footsteps of Dr. David Harper; his insight, hard work, and straightforward leadership have charted a course of excellence for our Association. It has been a privilege as President-elect and will continue to be a privilege to work with the Association's loyal and outstanding staff. Their dedication and diligence are responsible for the effective and efficient administration and day-to-day operation of the Association.

With any privilege, there are responsibilities; responsibilities which I am very proud to say that all of us take most seriously. The draft of the OSMA Mission Statement eloquently expresses these responsibilities: "To promote the best health for the people of Oklahoma in a professional, ethical, and compassionate manner by advocating for patients, representing physicians, and promoting the art and science of Medicine." Our commitment to the principles, in particular our Association's acceptance of the role of patient advocate, led to our lobbying effort which was a key element in passage of Immunization and drive-through mastectomy bills this past legislative session. Through the tireless work of Dr. Ed Brandt, Jr., Chairman of the OSMA Council on State Legislation and Regulation, our Association is providing critical support for The Fairness in Managed Care Act, which currently is making its way through the legislative process.

Of great importance are initiatives to improve the overall health of the people of Oklahoma of all economic strata, initiatives such as the creation of an Oklahoma Consortium for Improving the Health of Oklahomans. Formation of this Consortium is spearheaded by Dr. Gordon H. Deckert, President of the Board of Health, as a result of his State of the State's Health Report. Our Association will wholeheartedly support and participate in these types of initiatives.

In an age of almost daily change in the environment in which we practice, adequate communication is vital. If we are to fulfill our obligations as the patient's advocate and to enhance unity and collegiality of our profession, prompt and accurate dissemination of information is critical. Presently, the written word provides the primary means of communication for the OSMA. Utilizing the *Journal* and the monthly *OSMA News*, our membership has been kept abreast of activities at the Association headquarters and of the scientific and political developments necessary to adequately manage our practices and to care for our patients. This year, I plan to establish a new council to incorporate the already existing written work with the vast information available on the electronic highway. This expanded communications effort is mandatory.

A current and very real concern of all of us is the selection of a new Executive Director for our Association. The Search Committee established by the Board of Trustees is moving carefully and purposefully to assure the selection of the best person for this position. You will be kept up-to-date as these deliberations progress.

As your OSMA President, I will make every effort to meet the requirements of this office with integrity by being available and accountable. Thank you for the privilege.

REPORT OF THE ACTING EXECUTIVE DIRECTOR

Opening Session, OSMA House of Delegates, April 25, 1997

By Kathleen A. Musson

Mr. Speaker, Dr. Harper, Dr. Selby, Officers, Delegates and guests:

As the *"Acting"* Executive Director of the Oklahoma State Medical Association, I want to thank you for the honor afforded to me and for the privilege of serving a group of people whom I feel are the most dedicated and sincere of any group, anywhere, the physicians of the Oklahoma State Medical Association. I only hope I have been worthy of the trust and confidence placed in me and that in some way I have made a contribution to the progress and viability of the Association. I encourage and welcome the support, suggestions and recommendations that any of you may have. I can not guarantee that during the past four months, I have made all the right decisions; but I do guarantee that those decisions have been made with sincerity and conscientiousness.



Mrs. Musson

As most of you know, I was asked to take the *"role"* of the *"acting"* executive director during a time of stressful transition. During these past 4 months, I could not have survived without the encouragement and assistance of an outstanding support staff; Shirley Burnett, Comptroller, Susan Records, Director of Publications; Judy Lake, Membership & Alliance Coordinator; Administrative Assistants Toni Farrar and Barbara Matthews; and Receptionist/Secretaries Janet Carr and Marilyn Fick.

And as we look to the future and a new CEO to take center stage, If we were in the motion picture industry, I sincerely believe the entire staff should receive an academy award for the parts they have played during this transition; and in lieu of that, I encourage you to show them your appreciation as often as possible.

When I realized I was supposed to come before you today and give you some words of wisdom and reassurance, my first thoughts were to review the past few years and enlighten you about all the positive things your association has accomplished, despite the many staffing changes which have taken place... Accomplishments ranging from things such as building renovations, including new heating and air units and roofing for the association headquarters, OSMA's computer system upgrades and leap into cyberspace with the development of its website to OSMA's progressive efforts at the state capitol this legislative session.

However, I realized these are details of which you have already been made aware, so I continued my search for a topic.

That's when I realized that it is with a sense of awe that I even approach this podium today.

Awe. Such a small word representing such immense feelings. The dictionary describes awe as "dread mingled with veneration; respect mixed with personal affection," making it the appropriate word to describe my feelings for this group today. I approach you with awe, not only because of the respect and admiration I have for many of you individually, but also for the respect I have for all of you collectively; a well-deserved respect that you have earned and have a right to receive. Collectively you represent an association with a strong history.

A history that not only began 150 years ago in Philadelphia when Dr. Nathan Davis and the first physicians gathered together to begin what is now one of the strongest associations in the nation, the American Medical Association; but also a state history that has its own roots, with a beginning in Indian Territory in 1881 and an Oklahoma Territorial Medical Association in 1904. In order to have a stronger professional association, also affording them better representation at the then 3 year old AMA House of Delegates, the leaders of these two territorial organizations resolved to join together to form a common organization to work for the betterment of medicine in the soon to be state of Oklahoma.

In 1906 the Oklahoma Sate Medical Association was officially formed. That effort to have a stronger association has continued over the past century and today represents an association encompassing over 5000 physician members, and I'm sure it will continue to grow as we enter the next millennium.

I know many of you have been concerned that your association has been somewhat of a wayward ship tossed along rough waters; first losing its captain, with most of the crew jumping ship as well. However, I would like to re-enforce that this ship, your association, is not a sinking one, but rather is one that has simply been stalled by those rough waters.

Like a well-built ship, your association has a solid structure; one built with integrity and compassion by your colleagues who have devoted their time and energy over the past century to make this association a stronger, more viable one.

My experience with this association dates back to 1970 and in fact I've worked for 3 of the only four Executive Directors this association has had and also with with 14 different Presidents, many of whom are still dedicated to this association and are present here today.

Because of the dedication of the current association

staff, along with the encouragement and support of the current and past leadership and the membership, I can assure that it this ship is still on course, heading toward a calmer sea.

Some of you may not be aware, but for more than half its existence this association had no paid staff. Over those years, many great deeds were accomplished by this association, through the efforts of able leaders, united by common goals, and combined with the solidarity of its membership.

In closing, I ask you to remember what this association is and what it is not. It is not represented *only* by the headquarters building; it is not represented *only* by the association staff; and it is not represented *only* by the elected leadership. This association is represented by you and the other 4500+ physicians in this state who singularly are limited, but jointly have the ability to be, well... frankly, *"awesome"!*

INDEX TO THE PROCEEDINGS OF THE 1997 ANNUAL MEETING OF THE OSMA HOUSE OF DELEGATES

Acting Executive Director, Report of 261
Alliance 286
Audit and Appropriations 281
Board of Trustees 282
Board of Trustees, Supplemental Report 283
Closing Session, Minutes 266
Financial Statements 291
Governmental Activities 312
International Medical Graduates . 322
Internet Advisory Committee 307
Journal of the Oklahoma State Medical Association 307
Long Range Planning and Development 285
Medical Education 319
Medical Services 306
Medical Student Section 309
Member Services 316
Membership Report 303
Mission Statement and Goals 333
Necrology Report 334
Oklahoma Foundation for Medical Quality, Inc. 324
OMPAC 322
Opening Session, Minutes 263
Organized Medical Staff Section 309
Pension Plan Committee 285
Photographs 330
Physician Recovery Committee .. 320
PLICO 287
President, Report of the 259
President-Elect, Report of the 260
Professional and Public Relations 304
Public and Mental Health 304
Resolutions 271

- #1- Fee Splitting 271
- #2- Treatment of Patients by a Medical or Osteopathic Physician Licensed by and in the State of Oklahoma .. 271
- #3- AAMSE's 50th Anniversary 271
- #4- Advanced Directive for Each Nursing Home Resident 271
- #5- AMA Delegation Surveying OSMA Membership on Policy and Actions Within the AMA 272
- #6- Changes in OSMA Bylaws to Approve Membership Privileges in the Association for Osteopathic Physicians 272
- #7- Appointment of an Ad Hoc Committee to Consider All Aspects Relating to the Enactment of Tort Reform in Oklahoma 272
- #8- Reducing Unintended Pregnancy Through Adequate Funding of Family Planning Services 273
- #9- Reporting Immunizations to the Oklahoma State Immunization Information System (OSIIS) 273
- #10- Physician Recognition Program ... 273
- #11- Support of Breastfeeding 274
- #12- Women's Health 274
- #13- Men's Health 275
- #14- Unified Membership 275
- #15- Oklahoma Health Care Authority As It Deals with Sooner Care 275
- #16- Access to Sterile Syringes and Needles 276
- #17- Reducing HIV/STD Transmission Through Consistent and Correct Condom Usage 276
- #18- Tobacco and School Publications . 276
- #19- Tobacco Advertising 277
- #20- Home Health Care 277
- #21- Sooner Care Patients 277
- #22- Rabies Public Awareness Program 277
- #23- Biomedical Ethics 278
- #24- Survey of Oklahoma Health Plans 278
- #25- Health Care Authority 278
- Substitute Resolution 15, 21, and 25 278
- #26- HIV Prevention Act of 1997 279
- #27- Insurance Coverage for Immunizations 279
- #28- Congressional Delegation to Support HR586 279
- #29- Expenses 279

Vannatta Commendation 279
Meece Commendation 279
Vanhooser Commendation 280
Coleman Commendation 280
Kelsey Commendation 280

Secretary-Treasurer 288
State Legislation and Regulation 313
Reference Committee I 281
Reference Committee II 301
Reference Committee III 311
Young Physicians Section 310

OPENING SESSION, OSMA House of Delegates

Minutes [Unapproved draft]
Friday, April 25, 1997

I. Call to Order, Invocation and National Anthem
The House of Delegates convened the 91st Annual Session of the House of Delegates at the Tulsa Southern Hills Marriott on Friday, April 25, 1997. Speaker Boyd O. Whitlock, MD, called the meeting to order at 8:30 a.m.

Chaplain Patrick Lester, MD, Tulsa, gave the Invocation.

The National Anthem was sung by the Tulsa Memorial High School Choir under the direction of Dr. Dan Call.

II. Report of the Credentials Committee
Credentials Committee Chairman, Scott Dunitz, MD, Tulsa, announced that after reviewing the number of the Delegates and there being greater than 113 Delegates a quorum is present.

III. Introductions
Dr. Whitlock introduced those at the head table: Bruce L. Storms, MD, Vice Speaker, House of Delegates; David L. Harper, MD, President; David M. Selby, MD, President-Elect; Mary Anne McCaffree, MD, Vice President; Robert J. Weedn, MD, Chair, Board of Trustees; Chester Bynum, MD, Vice Chair, Board of Trustees; Carol Imes, MD, Secretary-Treasurer; Percy Wootton, MD, AMA President-Elect; Kathy Musson, Acting Executive Director and Barbara Matthews, Administrative Assistant.

Dr. Whitlock then introduced and welcomed the following special guests: Dr. Charles Farmer, Southern Medical Association; John Montgomery, Federal Lobbyist; James Schleck, AMA Field Representative; Lanny Day, Arkansas Blue Cross & Blue Shield Representative; Janice Hudson, Medical Student Section, State Chairman; Doris Clark, OCMS; Jana Timberlake, OCMS; Debbie Adams, OCMS; Paul Patton, TCMS; Tanya Luce, TCMS; Barbara Jett, OSMAA President; Doris Edge, OSMAA President-Elect; Diane Chow, AMA Secretary, and Gwen Pappas, Southern Medical Association Alliance President-Elect.

Dr. Whitlock recognized the OSMA staff and thanked them for their support and hard work that went in to making the Annual Meeting a success.

Dr. Whitlock asked the Past Presidents to stand and be recognized.

IV. Approval of the Minutes of the 1996 Annual Meeting
Motion was made, seconded and passed to approve the Opening and Closing Session Minutes from the 1996 OSMA Annual Meeting.

V. AMA-ERF (Presentation of Checks)
Dr. Whitlock introduced Mrs. Barbara Jett, President of the Oklahoma State Medical Association Alliance. Mrs. Jett thanked the OSMA for their financial support and gave a few brief remarks in regards to the efforts of the Alliance this year. Mrs. Jett introduced Cheryl Baker, AMA/ERF Chair, who then presented the AMA/ERF checks to DeWayne Andrews, MD, and Dan Plunkett, MD.

Dr. Andrews received a check in the amount of $30,991.00 for the University of Oklahoma College of Medicine, Oklahoma City; Dr. Plunkett received a check in the amount of $1,645.00 for the University of Oklahoma College of Medicine, in Tulsa.

VI. Presentation of the *Journal* Awards—Ray V. McIntyre, MD
Dr. Whitlock introduced Ray V. McIntyre, MD, *Journal* Editor-in-Chief, to make the presentations of the *Journal* Awards.

Robert Smith, MD, Oklahoma City received the award for the "Best *Journal* Cover Photograph Award." Dr. Smith's photograph was featured on the September 1996 issue of the *Journal*.

The Mark R. Johnson Award for Excellence in Medical Writing was awarded to Ahmed Amayem, MD, Anesthesiology Resident in Oklahoma City. Dr. Amayem was the lead author of the paper, "A Case of Unexplained Desaturation during Laparoscopic Cholecystectomy," published in the April 1996 *Journal*.

Dr. McIntyre presented the "Charlotte S. Leebron Memorial Trust Fund Award" to Dr. Robert M. Hamm, Dr. Ronald J. Hicks, and Dr. Debra A. Bemben, for their paper "Antibiotics and Respiratory Infections: Do Antibiotic Prescriptions Improve Outcomes?" The paper was published in the August 1996 *Journal*. Dr. Hamm received the award and thanked the OSMA for this honor.

The annual stipends for the Editorial Board were presented by Dr. McIntyre.

VII. Wyeth-Ayerst Physician Award for Community Service
Dr. Whitlock introduced Robert J. Weedn, MD, who made brief remarks to the Delegation on behalf of Dr. William K. Walker, Marlow, who was this year's recipient of the award. Dr. Walker was unable to attend due to his health.

VIII. Resolutions of Commendation
Dr. J. Chris Carey was called upon to present the Resolution of Commendation to Jerry Vannatta, MD, for his outstanding work as the Interim Dean of the University of Oklahoma.

Dr. Jay Gregory was called upon to present Resolutions of Commendation to the following physicians for service as members of the Oklahoma Delegation to the American Medical Association:

J. Ross Vanhooser, MD 1996-1997
William O. Coleman, MD 1984-1997

Dr. William Bernhardt was called upon to give the Resolution of Commendation to Lyle Kelsey, for his dedication and hard work during his time of employment at the Oklahoma State Medical Association.

IX. Remarks from AMA President-Elect—Percy Wootton, MD
Dr. Percy Wooton, AMA President-Elect thanked the officers and members of the Association and gave brief remarks concerning the AMA.
[Dr. Wooton's address was published in full in the May/June '97 issue of the *Journal*.]

X. Announcements
Dr. Whitlock informed the Delegation

of the Supplemental Report of the Board of Trustees and the late resolutions that were approved by the Board of Trustees could be picked up in the back of the room.

Dr. Whitlock also informed the delegation of the Candidate's Forum, Reference Committee Meetings, CME courses offered, OU Alumni Dinner and several other functions that will be available during the weekend. The OMPAC meeting will be held on Friday at 4:30 and only dues paying members will be allowed to vote. The Governmental Activities committee will meet on Saturday at 3:00 p.m. The OSMA Alliance House of Delegates has been moved from Friday to Saturday. The Inaugural Dinner will be held on Saturday evening and tickets for all the events can be purchased at the ticket desk.

Dr. Whitlock and Dr. Storms wanted to express to the membership that any handouts will need to be viewed by the Speaker and Vice-Speaker before distribution.

XI. Remarks of the President—David L. Harper, MD

Dr. David Harper presented his report as outgoing President of the OSMA. Dr. Harper noted the changes that have taken place at the OSMA during the past year. He thanked the staff, Board of Trustees and members this past year and feels the Association has become a much more cohesive organization. The immediate goal this year was to get our own house in order and put behind us the arguing, bickering and internal problems that have plagued the Association in recent years. The Association is moving forward together and many of the goals are being accomplished. Representation of patients and physicians should be one of the most important jobs of the Association. This year new efforts and commitments have been made in achieving this goal. Dr. McCaffree has done an excellent job in leading the efforts of the Long Range Planning & Development Council.

PLICO continues to be one of our crowning achievements adapting to an ever changing environment. We have also joined forces with the OCVO with the ultimate goal of a uniform application process for hospitals and managed care organizations which ultimately could result in one credentialing requirement every two years for all physicians.

In closing, Dr. Harper stated that we should never forget our primary concern; and that is our patient. Dr. Harper thanked the members for the honor and the opportunity for serving as the President this year.

[Dr. Harper's speech is published in full elsewhere in this issue of the *Journal*.]

XII. Recess for Delegation Caucus

Dr. Whitlock declared a 10-minute recess for the delegation caucuses to prepare for nominations of the various Association offices. Dr. Whitlock reminded the counties of the Trustee positions that are currently open. Nominations will be made from the floor and seconding speeches will not be made.

XIII. Nominations for Elections

Bruce Storms, MD, Vice Speaker of the House, announced the floor was open for nominations for the following positions:

President-Elect (one-year term)
Ray L. Cornelision, MD, Oklahoma City
Mary Anne McCaffree, MD, Oklahoma City

Vice-President (one-year term)
Boyd O. Whitlock, MD

Secretary-Treasurer
Jack J. Beller, MD
Carol B. Imes, MD

Delegates to the AMA (two-year terms, five positions open)
Norman L. Dunitz, MD
William H. Hall, MD
David L. Harper, MD
Carol Blackwell, MD
Mary Anne McCaffree, MD
Gary F. Strebel, MD

Alternate Delegates to the AMA (two-year terms, five positions open)
Marcel Binstock, MD
William G. Bernhardt, MD
Carl T. Hook, MD
Patrick D. Lester, MD
Mukesh T. Parekh, MD
W.F. Phelps, MD
Kenneth N. Vermette, MD
Arthur Schipul, MD

PLICO Board of Directors
William O. Coleman, MD
Scott J. Dunitz, MD
Michael J. Haugh, MD
Joe S. Hester, MD
David M. Selby, MD

OSMA Trustee and Alternate Trustee Positions:

Trustee District I (Craig, Delaware, Mayes, Nowata, Ottawa, Rogers & Washington Counties)
Douglas G. Cox, MD
Alternate Trustee, District I
Reed L. Harned, MD

Trustee District II (Kay, Noble, Osage, Pawnee & Payne Counties)
Robert H. Phillips, MD
Alternate Trustee, District II
Richard L. Keim, MD

Trustee District III (Garfield, Grant, Kingfisher, Major, Alfalfa, Woods & Logan Counties)
David S. Russell, MD
Alternate Trustee, District III
James S. Gerber, MD

Trustee District IV (Beaver, Cimarron, Dewey, Ellis, Harper, Texas & Woodward Counties)
John Leatherman, MD
Alternate Trustee, District IV
Ed L. Calhoon, MD

Trustee District V (Beckham, Blaine, Canadian, Custer, & Roger Mills Counties)
James R. Rhymer, MD
Alternate Trustee, District V
Michael E. Aaron, MD

Trustee District IX (Adair, Cherokee, McIntosh, Okmulgee, Sequoyah, & Wagoner Counties)
Carl F. Critchfield, MD
Alternate Trustee, District IX
Joel W. Anderson, MD

Trustee District XIII (Caddo, Comanche, Cotton, Tillman, Grady, Jefferson & Stephens County)
Kenneth N. Vermette, MD
Alternate Trustee, District XIII
Randall L. Jenkins, MD

Trustee District XIV (Greer, Harmon, Jackson, Kiowa, & Washita Counties)
Noble L. Ballard, MD
Alternate Trustee, District XIV
Terrance Truong, MD

There being no other nominations, Dr. Storms called for a motion to cease nominations. A motion was made, seconded and passed to declare the nominations closed.

XIV. Remarks from the Chairman of the Board—Robert J. Weedn, MD
David L. Harper, MD, presented Robert J. Weedn, MD, with a commendation for his hard work and dedication to the Board of Trustees this year as Chairman of the Board.

Dr. Weedn reported that the Supplemental Report of the Board of Trustees is in the back of the room and called special attention to seveal items in the report. Dr. Weedn wanted the membership to be aware that the expense of the search firm for the Executive Director has increased from $15,000 to $50,000 and the Board will make every effort to find the best candidate possible. Dr. Weedn went on to say that the members of the Executive Committee and Board of Trustees met with the leadership of the Osteopathic Association and the Osteopathic Association is not supportive of the OSMA opening membership to them. The Long Range Planning & Development Committee has listed that a further study of the Osteopathic Physicians joining the OSMA be completed.

The OSMA voted in the Board meeting on Thursday to grant another $50,000 to the Oklahoma Centralized Verification Organization (OCVO). The Board feels strongly that credentialing can be simplified and it is in our best interest and the interest of our membership for this member service to go forward on a statewide level.

Dr. Weedn stated that the Board of Trustees approved a significant change in the publication of the *Journal* and encouraged the membership to carefully look at the Mission Statement and goals developed by the Long Range Planning & Development Council under the direction of Mary Anne McCaffree, MD, who also is chair of the Ad Hoc Committee on Managed Medicaid and has a report available.

In closing, Dr. Weedn introduced the new Chairman of the Board W. F. Phelps, MD, Tulsa, and Robert H. Phillips, MD, Stillwater, Vice Chairman of the Board of Trustees. Dr. Weedn thanked the Board Members, and the Delegates, and strongly encouraged them to have their members in the Counties become involved in the Association.

XV. Remarks from the Secretary-Treasurer—Carol Imes, MD
Dr. Whitlock called on Dr. Imes to make her report.

Dr. Imes stated that the financial information prepared for this meeting includes the report of the Secretary-Treasurer, the 1996 Annual Audit by Ernst & Young, the 1997 Revised Annual Budget, and the 1997 first quarter Financial Statement. Dr. Imes highlighted various points of interest, the first being the investments with increases over the past few years. Cash and cash equivalents have shown a steady growth since 1993 of approximately $611,000 or 60%. Reserves are invested according to a conservative investment policy of the OSMA which includes government secured entities on which the interest return rate has doubled over the last 3-4 years. The major expenditures are primarily the physical improvements of the OSMA. The audit has been completed by Ernst and Young and was more in-depth than audits in the past due to the fact that they were a new auditing firm, and they reviewed approximately three years of information. The audit was found to be very satisfactory from the OSMA standpoint. The 1997 annual budget is included for review; and it attempts to include all the expenditures with one change being the Executive Director search increase from $15,000 to $50,000 with no monies being spent as of yet. The OSMA budget comparison has shown increase in revenue steadily for a variety of reasons with expenditures increased as well. The OSMA dues have increased by approximately $40,000 each year due to a significant increase in our membership. The Education and Research Foundation is included which will reflect the commitment to the OCVO of $50,000. The defined benefit pension plan will be terminated as planned later in 1997. The latest evaluation that is available was approximately $86,000 which is much lower than originally evaluated. The profit sharing plan is mentioned so that the membership will know that there are two plans that are in place. One is a defined contribution of 10% of the employee's gross salary. A new CPA helps the OSMA with tax returns and any accounting tasks that OSMA is not able to handle in house. The 1997 first quarter is positive, with more revenue than expenses.

In summary, Dr. Imes stated that the OSMA has the best financial picture at this time in the history of the organization.

XVI. Remarks from John Montgomery, OSMA Federal Lobbyist—John Montgomery
Mr. Montgomery updated the Delegates concerning the various Federal bills in Washington. The congressional delegation is given the objectives of the OSMA, and Mr. Montgomery works with them closely to see that these objectives are carried out.

XVII. Remarks from Blue Cross & Blue Shield Representative—Lanny Day
Mr. Day addressed the Delegation on the current status of the Medicare transition in Oklahoma which is taking place. Aetna, after 30 years of being the carrier in Oklahoma, has decided to withdraw from the Medicare program. They made the announcement last July. Blue Cross & Blue Shield will be taking over the contract effective May 1, 1997. This will include the state of New Mexico as well. Mr. Day expressed that there will be no noticeable changes within the program, and thanked the Delegation for the opportunity to talk with them and encour-

aged them to call if they have any questions.

XVIII. Remarks from the Acting Executive Director—Kathy Musson
Mrs. Musson thanked the Board, Delegates, and staff and expressed her appreciation for the confidence placed in her during this time of transition.
[The full text of Mrs. Musson's speech appears elsewhere in this issue of the *Journal.*]

XIX. Other Business to Come Before the House
Dr. Whitlock announced the times and locations of the Reference Committee meetings and read the list of sponsors who helped with the banquets and receptions. He encouraged the membership to visit the exhibitor booths. Dr. Whitlock announced that Jone Kendrick is recovering at a rehabilitation hospital in Dallas, and her address and phone number are available from the staff.

XX. Necrology Report
Dr. Whitlock asked the Delegates to stand as he read the names from the Necrology report. After the reading of the names there was a moment of silence in remembrance.
[The complete Necrology Report appears elsewhere in this issue of the *Journal.*]

XXI. Recess
There being no further business to come before the House, a motion was made, seconded and passed to recess the Opening Session of the House of Delegates until 9:00 a.m. Sunday, April 27, 1997.

CLOSING SESSION, OSMA House of Delegates

Minutes [Unapproved Draft]
Sunday, April 27, 1997

I. Call to Order
The Closing Session of the 91st Annual Meeting of the House of Delegates was called to order by Speaker Boyd O. Whitlock, MD, at 9:00 a.m., at the Tulsa Southern Hills Marriott.

II. Invocation
Mrs. Barbara Jett, outgoing Alliance President, gave the invocation.

III. Report of the Credentials Committee
Credentials Committee Chairman Scott Dunitz, MD, announced that a quorum was present.

IV. Announcements
Dr. Whitlock informed the Delegation that the Reference Committee Reports were in the back of the room. Pictures will be taken and a luncheon for the new Officers, AMA Delegates/Alternates and Trustees will be after the Closing Session in the Sycamore Room.

V. Remarks of the President-Elect—David M. Selby, MD
Dr. Whitlock introduced David M. Selby, MD, President-Elect, to make remarks before the House.

Dr. Selby stated that it is a privilege to follow in the very able footsteps of Dr. David L. Harper; his insight, hard work, and straightforward leadership have charted a course of excellence for our Association. Dr. Selby stated that the practice of medicine is a privilege and with that are responsibilities. He noted that the draft of the Mission Statement eloquently expresses these responsibilities.

Dr. Selby also informed the Delegation that this year he plans to establish a new Council. This Council will incorporate the already existing written work with the vast information available on the electronic highway.

In closing, Dr. Selby stated that he will make every effort to meet the requirements of the office of President with integrity by being available and accountable.
[The complete text of Dr. Selby's speech appears elsewhere in this issue of the *Journal.*]

VI. Annual PLICO Shareholders Meeting
The Annual Shareholders Meeting of PLICO was convened in session at 9:43 a.m. Floyd Miller, MD, Chairman, of PLICO was introduced to present his report.

Dr. Miller stated that PLICO was in the best financial condition it has ever been in. Last year PLICO had a record loss payment of the professional liability which is much more than the average year, but did not affect the financial statement. Dr. Miller said that last year the Claims Committee paid several large claims in a relatively short time. This unusual phenomenon which occurred in the middle of the year proved to be an aberration.

In closing, Dr. Miller stated that PLICO continues to provide high-quality insurance to the vast majority of physicians in Oklahoma. PLICO's success has been achieved through the loyalty and commitment of OSMA members, and the dedication of the PLICO Board of Directors OSMA has elected.

A motion was made, seconded and passed to approve the annual PLICO Shareholders Report.

This ended the Annual PLICO Shareholders Meeting and the House reconvened at 10:17 a.m.

VII. Election Results
Dr. Whitlock asked Bruce L. Storms to announce the election results. Dr. Storms announced the following results:

President-Elect (one-year term)
Mary Anne McCaffree, MD

Vice-President (one-year term)
Boyd O. Whitlock, MD

Secretary-Treasurer
Carol B. Imes, MD

Delegates to the AMA (two-year terms, five positions open)
Norman L. Dunitz, MD
William H. Hall, MD
David L. Harper, MD
Mary Anne McCaffree, MD
Gary F. Strebel, MD

Alternate Delegates to the AMA (two-year terms, five positions open)
William G. Bernhardt, MD
Carl T. Hook, MD
Patrick D. Lester, MD
Mukesh T. Parekh, MD
W.F. Phelps, MD

PLICO Board of Directors
William O. Coleman, MD
Scott J. Dunitz, MD
Michael J. Haugh, MD
Joe S. Hester, MD
David M. Selby, MD

OSMA Trustee and Alternate Trustee Positions:

Trustee District I (Craig, Delaware, Mayes, Nowata, Ottawa, Rogers & Washington Counties)
Douglas G. Cox, MD
Alternate Trustee, District I
Reed L. Harned, MD

Trustee District II (Kay, Noble, Osage, Pawnee & Payne Counties)
Robert H. Phillips, MD
Alternate Trustee, District II
Richard L. Keim, MD

Trustee District III (Garfield, Grant, Kingfisher, Major, Alfalfa, Woods & Logan Counties)
David S. Russell, MD
Alternate Trustee, District III
James S. Gerber, MD

Trustee District IV (Beaver, Cimarron, Dewey, Ellis, Harper, Major, Texas & Woodward Counties)
John Leatherman, MD
Alternate Trustee, District IV
Ed L. Calhoon, MD

Trustee District V (Beckham, Blaine, Canadian, Custer, & Roger Mills Counties)
James R. Rhymer, MD
Alternate Trustee, District V
Michael E. Aaron, MD

Trustee District IX (Adair, Cherokee, McIntosh, Okmulgee, Sequoyah, & Wagoner Counties)
Carl F. Critchfield, MD
Alternate Trustee, District IX
Joel W. Anderson, MD

Trustee District XIII (Caddo, Comanche, Cotton, Tillman, Grady, Jefferson & Stephens County)
Kenneth N. Vermette, MD
Alternate Trustee, District XIII
Randall L. Jenkins, MD

Trustee District XIV (Greer, Harmon, Jackson, Kiowa, & Washita Counties)
Noble L. Ballard, MD
Alternate Trustee, District XIV
Terrance Truong, MD

Dr. Storms expressed appreciation to all of the Tellers and asked the House to congratulate all of the winners.

VIII. Reference Committee Reports
The Reference Committee Reports considered by the House are attached and made a part of these official minutes.

Report of Reference Committee I

Presented by
J. Chris Carey, MD, Chair

(1) Report of the Board of Trustees
Recommendation:
Mr. Speaker, your Reference Committee recommends to accept the Report of The Board of Trustees with the following amendment which will be reflected in further reports:

The changing of the title Chief Executive Officer to Executive Director, and remit back to the Board of Trustees a way of developing a policy manual and organization hierarchy for and including the Executive Director.

Adopted with editorial changes.

(2) Report of the Council on Long Range Planning & Development
Recommendation:
Mr. Speaker, your Reference Committee recommends to accept the Report of the Council on Long Range Planning & Development with the following amendments to read:

Goal 2
2.2 Promote DO membership

Adopted as amended.

(3) Report of the Secretary-Treasurer
Recommendation:
Mr. Speaker, your Reference Committee recommends to accept the Report of the Secretary-Treasurer with the following amendments:

Page three of the 1997 revised budget to include the funding for the Oklahoma Centralized Verification Organization of $50,000, and to increase the amount allocated for the Executive Director Search to $50,000.

Adopted as amended.

(4) Resolution 1—Fee Splitting
Recommendation:
Mr. Speaker, your Reference Committee recommends that Resolution 1 *not* be adopted and that the Oklahoma State Medical Association follow the guidelines recommended by the AMA concerning fee splitting.

Not adopted.

(5) Resolution 6—Changes in the OSMA's bylaws to approve membership privileges in the Association for Osteopathic physicians
Recommendation:
Mr. Speaker, your Reference Committee recommends to accept Resolution 6 with amendments to read:

Resolved, that the House of Delegates of the Oklahoma State Medical Association approve the appropriate changes in the OSMA bylaws to approve membership privileges in the

Association for Osteopathic Physicians.

Adopted as amended.

(6) Resolution 14—Unified Membership
Recommendation:
Mr. Speaker, your Reference Committee recommends that Resolution 14 *not* be adopted.

Not Adopted.

Consent Calendar

Recommended for Adoption:

(7) Membership Report
Report Adopted.

(8) Resolution 3—AAMSE's 50th Anniversary
Resolution Adopted.

(9) Late Resolution 24—Organized Medical Staff Section—State Survey
Late Resolution Adopted.

All Adopted.

Filed for Information:

(10) Report of the Appropriations and Audit Committee
Report is filed for information.

(11) Supplemental Report of the Board of Trustees
Report is filed for information.

(12) Report of the OSMA Employee Pension Plan
Report is filed for information.

(13) Report of the OSMA Alliance
Report is filed for information.

(14) Report of the Physicians Liability Insurance Company (PLICO)
Report is filed for information.

(15) Report of the President
Report is filed for information.

All filed for information.

The Report of Reference Committee I was approved by the House as a whole, as amended.

Report of Reference Committee II

Presented by
Michael Clendenin, MD, Chair

(1) Report of the OSMA *Journal*
Recommendation:
Mr. Speaker, your Reference Committee recommends to adopt the Report of the OSMA *Journal* with the following amendment:

It is recommended that publication of the Journal of the Oklahoma State Medical Association *be changed to a bi-monthly basis for one year and report back to the House, and that the use of saddlestitch binding be utilized as needed. It is also recommended that the scope of the* Journal *be changed to include articles other than those which are scientific in nature.*

Adopted as amended.

(2) Resolution 8—Reducing Unintended Pregnancy Through Adequate Funding of Family Planning
Recommendation:
Mr. Speaker, your Reference Committee recommends to adopt Resolution 8 with the following amendment to the second Resolved:

Resolved, *That the Oklahoma State Medical Association supports the concept that all pregnancies should be intended at conception and supports increased state funding for the expansion of family planning services in an effort to reduce unintended pregnancies and their associated health and social costs.*

Adopted as amended.

(3) Resolution 10—Physician Recognition Program
Recommendation:
Mr. Speaker, your Reference Committee recommends that Resolution 10 *not* be adopted.

Not Adopted.

(4) Resolution 16—Access to Sterile Syringes
Recommendation:
Mr. Speaker, your Reference Committee recommends that Resolution 16 *not* be adopted.

Not adopted.

(5) Resolution 17—Reducing HIV/STD Transmission Through Consistent and Correct Condom Usage
Recommendation:
Mr. Speaker, your Reference Committee recommends to adopt Resolution 17 with the following amendment to the second Resolved:

Resolved, *That the Oklahoma State Medical Association support programs that emphasize condom usage for people at risk of contracting HIV and other sexually transmitted diseases.*

Adopted as amended.

(6) Resolution 18—Tobacco & School Publications
Recommendation:
Mr. Speaker, your Reference Committee recommends that Resolution 18 *not* be adopted.

Not Adopted.

(7) Resolution 19—Tobacco Advertising
Recommendation:
Mr. Speaker, your Reference Committee recommends that Resolution #19 be adopted with the following amendment by adding a second Resolved that reads as follows:

Resolved, *That the Oklahoma State Medical Association members and the Oklahoma State Medical Association Alliance members work with local school boards to inform them of school publications that promote unhealthy*

life styles and substitute them with publications that encourage healthy life styles for young people.

Adopted as amended.

(8) Resolution 23—Telemedicine Project with the AMA Bioethics Center
Recommendation:
Mr. Speaker, your Reference Committee recommends that Corrected Resolution 23 be adopted with the following amendment to the first Resolved:

Resolved, *That the OSMA develop a telemedicine project jointly with the AMA Center of Biomedical Ethics which will be made available to all OSMA members;*

Adopted as amended.

(9) Late Resolution 28—Congressional Delegation to Support HR 586
Recommendation:
Mr Speaker, your Reference Committee recommends that Late Resolution 28 be adopted with the following amendment to the second Resolved:

Resolved, *That the President of the Oklahoma State Medical Association write a letter to Representative Steve Largent strongly encouraging him to remain as an author on bill number HR 586.*

Adopted as amended.

Consent Calendar

Recommended for Adoption:

(10) Report of the Council on Professional and Public Relations
Report Adopted.

(11) Report of the Council on Public and Mental Health
Report Adopted.

(12) Resolution 9—Reporting Immunizations to the Oklahoma State Immunization Information System
Resolution Adopted.

(13) Resolution 11—Support of Breast-Feeding
Resolution Adopted.

(14) Resolution 12—Women's Health
Resolution Adopted.

(15) Resolution 13—Men's Health
Resolution Adopted.

(16) Resolution 22—Rabies Public Awareness Program
Resolution Adopted.

(17) Late Resolution 27—Insurance Coverage for Immunizations
Resolution Adopted.

(18) Late Resolution 29—Practice Expenses
Resolution Adopted.

The Report of Reference Committee II was approved by the House as a whole, as amended.

Report of Reference Committee III

Presented by Jan Chleborad, MD, Chair

(1) Report of the Oklahoma Medical Political Action Committee
Recommendation:
Mr. Speaker, your Reference Committee recommends that the Report of the Oklahoma Medical Political Action Committee *not* be adopted. It is recommended that a complete accounting of all donations and expenditures be made for the 1996 legislative year. This report should be made available to the OMPAC membership and presented to the 1998 House of Delegates.

Not adopted and recommendation accepted.

(2) Resolution 2—Treatment of Patients by a Licensed Physician
Recommendation:
Mr. Speaker, your Reference Committee recommends to accept Resolution 2 with the following amendments:

The title of Resolution 2 be changed to read as follows: *Treatment of Patients by a Medical or Osteopathic Physician Licensed by and in the State of Oklahoma*

That line 24 be amended to read: *treatment of patients be carried out only by a medical or osteopathic physician licensed by and in the state of Oklahoma*

Adopted as amended.

(3) Resolutions 15, 21 and 25 were considered together
Recommendation:
Mr. Speaker, your Reference Committee recommends that Resolutions 15, 21, and 25 *not* be adopted and recommends that the following Substitute Resolution be adopted:

[The *Whereases* and other material in this resolution have not been printed here, in accordance with the vote of the House of Delegates to strike the material. The deleted material is available at OSMA headquarters.]

....Resolved, *That the OSMA meet with the Legislative Oversight Committee to address these serious issues and develop solutions; and be it further...*

Resolved, *That the OSMA* Journal *publish the report of the Ad Hoc Committee*; and be it further*

Resolved, *That OSMA members contact their State Representatives and Senators to inform them of these issues and that any dollars saved from managed care should be reinvested in patient care...; and be it further*

Resolved, *That the OSMA working in conjunction with the state legislature seek to reorganize the Health Care Authority so as to reintroduce traditional values in medicine and work towards reestablishing the traditional patient-physician relationship; and be it further*

Resolved, *That the new Health Care Authority allow patient choice of provider, both physician and hospital, and will engender responsibility in the patient; and be it further...*

*The report of the Ad Hoc Committee appears in the May/June '97 *Journal*.

Closing Session *(continued)*

Resolved, *That the Oklahoma State Medical Association instruct our American Medical Association delegates to work with other states that have received a waiver from HCFA (Texas, Tennessee, Hawaii, California) for managed Medicaid and inform HCFA that the waiver system has not demonstrated its objectives in improving care for patients.*

Amendment to delete *Whereas*es passed.

Adopted as amended.

Consent Calendar

Recommended for Adoption:

(4) Report of the Council on Governmental Activities
Mr. Speaker, your Reference Committee recommends that the rccommendations of the Council on Governmental Activities be adopted and the remainder of the report be filed for information.

Adopted.

(5) Resolution 4—Advanced Directive (AD) for each Nursing Home Patient
Rcsolution Adopted.

Adopted.

(6) Resolution 5—AMA Delegation Surveying OSMA Membership on Policy and Actions Within the AMA
Resolution Adopted.

Adopted.

(7) Resolution 7—Appointment of an Ad Hoc Committee to Consider All Aspects Relating to the Enactment of Tort Reform in Oklahoma
Resolution Adopted.

Adopted.

(8) Resolution 20—Home Health Care
Resolution Adopted.

Adopted.

(9) Resolution 26—HIV Prevention Act of 1997
Resolution Adopted.

Adopted.

Filed for Information:

(10) Report of the Council on State Legislation and Regulation
Report is filed for information.

(11) Report of the Member Services Council
Report is filed for information.

(12) Report of the Council on Medical Education
Report is filed for information.

(13) Report of the Physicians Recovery Program
Rcport is filed for information.

(14) Report of Commission on International Medical Graduates
Report is filed for information.

(15) Report of the Oklahoma Foundation for Medical Quality
Report is filcd for information.

All filed for information.

The Report of Referenee Committee III was approved as a whole, as amended.

IX. Privilege of the Floor—David M. Selby, MD
Dr. David M. Selby read a statement concerning the death of G. Rainey Williams, MD.

"The Medieal Communities of not only Oklahoma, but also the entire nation, suffered an immeasurable loss with the passing of Dr. G. Rainey Williams. The 'Professor,' as he was known, with his unsurpassed surgical and teaehing abilities, leaves to the citizens of our state and the nation a legaey of well-trained, dedicated, and caring physieians. Dr. Williams was greatly respected by all with whom he eame in eontact; he was held in the highest esteem by his eollegues and deeply loved by his friends and family. He will be sorely missed."

X. Other Business
Dr. Storms thanked everyone who worked to make the 91st Annual Meeting of the House of Delegates a sueeess.

XII. Adjournment
There being no further business, a motion was made, seeonded, and passed to adjourn the Closing Session of the House of Delegates at 11:17 a.m.

RESOLUTIONS

(NOT ADOPTED)

Resolution 1: Fee Splitting

(A-97)

Introduced by: Cleveland/McClain County Medical Society
Referred to: Reference Committee I

Whereas, The Code of Medical Ethics of the American Medical Association defines "Fee Splitting" as "payment by or to a physician solely for the referral of a patient"; and

Whereas, The Code of Medical Ethics of the American Medical Association deems "Fee Splitting" to be "unethical"; and

Whereas, The Code of Medical Ethics of the American Medical Association states "a physician may not accept payment of any kind, in any form, from any source,...for...referring a patient"; and

Whereas, Capitation payments to a physician who then refers a patient covered on a capitation basis that includes direct or indirect payment to a second physician at a fee less than the second physician's normal fee is equivalent to the second physician making a "payment of any kind, in any form, from any source" to the first physician for the referral of the patient; now therefore be it

Resolved, That "any form" of payment from one physician to a second physician whether by direct payment or indirectly from a capitation or "withhold" pool that results in the referring physician collecting or keeping a higher fee in exchange for the second physician accepting less than his or her normal fee be deemed fee splitting and as such be considered unethical.

(ADOPTED AS AMENDED)

Resolution 2: Treatment of Patients by a ~~Licensed Physician~~ Medical or Osteopathic Physician Licensed by and in the State of Oklahoma

(A-97)

Introduced by: Cleveland/McClain County Medical Society
Referred to: Reference Committee III

Whereas, The statutes of the State of Oklahoma define the practice of Medicine as "Any offer or attempt... to prevent, diagnose, correct, or treat in any manner or by any means... any disease, illness, pain, wound, fracture, infirmity, defect or abnormal physical or mental condition of any person... "; and

Whereas, The statutes also require that "every person before practicing medicine or surgery... must be in legal possession of the unrevoked license or certificate" authorizing him/her to practice medicine or surgery in the State of Oklahoma; and

Whereas, The statutes furthermore state that "any person so practicing... who is not in such legal possession thereof, shall be guilty of a misdemeanor... fined for the first offense... and shall, for any succeeding offense, be subject to fine...and in addition thereto, shall be imprisoned in a county jail... and in all instances, each day's practice shall constitute a separate and distinct offense."; and

Whereas, Some managed care and/or health insurance companies employ such unlicensed personnel who make decisions regarding the diagnosis and treatment of diseases, illnesses, and abnormal physical and mental conditions of patients who have had recommendations made by their duly licensed physician contrary to the decisions made by the unlicensed personnel; now therefore be it

Resolved, That the Oklahoma State Medical Association reaffirms the concept that decision-making and implementation functions involved with the diagnosis or treatment of patients be carried out only by ~~licensed physicians~~ a medical or osteopathic physician licensed by and in the State of Oklahoma, and be it further

Resolved, That the Oklahoma State Medical Association encourages the State of Oklahoma to prosecute any unlicensed individual or entity who attempts to practice medicine as defined by Oklahoma statutes.

(ADOPTED)

Resolution 3: AAMSE's 50th Anniversary

(A-97)

Introduced by: David L. Harper, MD President
Referred to: Reference Committee I

Whereas, the American Association of Medical Society Executives (AAMSE) is the professional association of medical society executives and serves their organizations indirectly by preparing medical society executives to be more effective advocates for the medical profession; and

Whereas, AAMSE has served to support the professional development and identity of all medical society executives; and

Whereas, the Oklahoma State Medical Association has been served by these members of AAMSE through our society's staff; and

Whereas, our AAMSE members have assisted the Oklahoma State Medical Association in promoting the quality of health care delivered by our members; now therefore be it

Resolved, that the Oklahoma State Medical Association expresses its sincere appreciation and commendation to AAMSE and our society's AAMSE members for their devotion to the advancement of medicine during this, AAMSE'S 50th Anniversary.

(ADOPTED AS AMENDED)

Resolution 4: Advanced Directive for Each Nursing Home Resident

(A-97)

Introduced by: Oklahoma County Medical Society Delegation
Referred to: Reference Committee III

Resolution 4 *(continued)*

Whereas, much intensive care is delivered in the last two weeks of life; and

Whereas, nursing home residents are often transferred to hospital through emergency rooms (ER) for terminal and other serious medical events; and

Whereas, such patients are often not able to dialogue with ER physicians about their overall health care; and

Whereas, the patient is uniquely empowered legally to determine his wishes with respect to any withholding of intense health care as well as fluid and nutrition and DNR status; now therefore be it

Resolved, that the AMA Council on Legislation be asked to consider and, in the absence of contraindication, urge that state health departments and other nursing home-inspecting agencies require nursing homes to have on file an Advanced Directive (AD) for each resident executed by the patient or legal guardian; and be it further

Resolved, that this AD accompany the resident patient to the hospital.

(ADOPTED)

Resolution 5: AMA Delegation Surveying OSMA Membership on Policy and Actions Within the AMA

(A-97)

Introduced by: Oklahoma County Medical Society Delegation
Referred to: Reference Committee I

Whereas, The AMA Delegation exists to represent Oklahoma in the AMA HOD; and

Whereas, communication from the Oklahoma AMA membership to the Delegation can be expected to improve its representation; now therefore be it

Resolved, that the OSMA annually survey its entire membership with a question asking members to identify points of disagreement they hold with AMA policy and actions and that each point of disagreement be made known timely to the Delegation.

(ADOPTED AS AMENDED)

Resolution 6: Changes in OSMA Bylaws to Approve Membership Privileges in the Association for Osteopathic Physicians

(A-97)

Introduced by: Tulsa County Medical Society
Referred to: Reference Committee I

Whereas, during this time of dramatic change in the way medicine is practiced and how physicians are perceived, it is important that all physicians work together toward common goals and for the benefit of all physicians; and

Whereas, Osteopathic physicians are eligible for membership in the American Medical Association and Board of Trustees Report 11, approved by the AMA House of Delegates at the 1993 Interim Meeting, calls on the AMA to encourage all state societies to accept Doctors of Osteopathy as members at every level of the federation; and

Whereas, the State of Oklahoma is one of only two states in the country in which Osteopathic physicians are not eligible to belong to the medical association; and

Whereas, an increasing number of OSMA members practice medicine with Osteopathic physicians; and

Whereas, a growing number of Osteopathic physicians are enrolled in residency programs at the University of Oklahoma and 24% of those physicians are currently enrolled in the residency program at the University of Oklahoma College of Medicine–Tulsa are Osteopathic physicians; now therefore be it

Resolved, that the House of Delegates of the Oklahoma State Medical Association approve the appropriate changes in the OSMA bylaws to approve membership privileges in the Association for Osteopathic physicians, ~~who have successfully completed ACGME approved post-graduate training.~~

(ADOPTED)

Resolution 7: Appointment of an Ad Hoc Committee to Consider All Aspects Relating to the Enactment of Tort Reform in Oklahoma

(A-97)

Introduced by: Marcel Binstock, MD
Referred to: Reference Committee III

Whereas, a 1995 OSMA resolution directing its president to appoint an ad hoc committee charged with the task of exploring remedies to curb the more egregious aspects of medical malpractice in Oklahoma has, as yet, not been implemented; and

Whereas, the Oklahoma legislature arbitrarily excluded the medical profession from an accord reached with the State's Commercial and industrial interests to enact meaningful tort reform legislation; and

Whereas, the legislature then summarily declared a moratorium on any further tort reform initiatives; and

Whereas, PLICO, faced with escalating medical litigation costs, has had to raise malpractice insurance premiums from its membership beset by steadily declining practice incomes; and

Whereas, the Byzantine pursuits of the legislature in the realm of tort reform portend a chilly reception to even modest OSMA remedial proposals; and

Whereas, a resolute, well coordinated lobbying campaign, bolstered by unwavering physician solidarity, in-depth knowledge of the issues and a clear delineation of our options are essential elements to a successful legislative endeavor; now therefore be it

Resolved, that time being the essence, the President of OSMA proceed without delay to appoint an ad hoc committee, as previously proposed, to consider all aspects relating to the enactment of tort reform in Oklahoma, and be it further

Resolved, that the ad hoc committee's findings be presented for discussion and possible ratification to the House of Delegates no later than the 1998 OSMA Annual meeting.

(ADOPTED AS AMENDED)

Resolution 8: Reducing Unintended Pregnancy Through Adequate Funding of Family Planning Services

(A-97)

Introduced by: Robert Mahaffey, MD, Chair, Council on Public and Mental Health

Referred to: Reference Committee II

American Medical Association
House of Delegates

Resolution:
(A-97)

Introduced by: Oklahoma Delegation
Subject: Reducing Unintended Pregnancy Through Adequate Funding of Family Planning Services
Referred to:

Whereas, Forty-five percent (45%) of all live births in Oklahoma result from pregnancies that are *unintended* and 13% of all live births result from pregnancies that are *unwanted;* and

Whereas, The Healthy Oklahomans 2000 Sentinel Objective is to reduce *unintended* pregnancy to 30%; and

Whereas, unintended pregnancies are associated with high risk pregnancies, low birth weight infants, birth defects, infant mortality, abortions, child abuse/neglect, domestic violence, crime and dependence on social welfare; and

Whereas, Oklahoma public health family planning clinics are at capacity and currently serve less than 40% of the estimated number of women, living at or below the federal poverty level, who are in need of family planning services; and

Whereas, Unwanted births in Oklahoma cost State Medicaid a minimum of 22 million each year in prenatal, newborn and intensive care costs; and

Whereas, family planning services for the uninsured are cost efficient, with every $1 invested saving $6.20 in annual public assistance costs, including Medicaid, Temporary Assistance for Needy Families (TANF), Food Stamps and WIC; now therefore be it

Resolved, That the Oklahoma State Medical Association reaffirms House of Delegates Policy (H-1991) urging health care professionals providing care for women of reproductive age, to assist them in planning for pregnancy, and supports age-appropriate education in esteem building, decision making and family life in an effort to introduce the concept of planning for childbearing in the educational process; and be it further

Resolved, That the Oklahoma State Medical Association supports the concept that all pregnancies should be intended at conception and supports increased state funding for the expansion of family planning services in an effort to reduce unintended pregnancies and their associated health and social costs; and be it further

Resolved, That the Oklahoma State Medical Association petition the American Medical Association House of Delegates to reaffirm current policy supporting funding for family planning program (Policy 75.992 A-90).

(ADOPTED)

Resolution 9: Reporting Immunizations to the Oklahoma State Immunization Information System (OSIIS)

(A-97)

Introduced by: Robert Mahaffey, MD, Chair, Council on Public and Mental Health

Referred to: Reference Committee II

Whereas, private physicians administer a third of the vaccine given to children in our state and this percentage is expected to increase under Medicaid managed care; and

Whereas, immediate access to childrens' complete immunization records is necessary to properly administer immunizations in a timely manner; and

Whereas, OSIIS is operational in all county health departments in the state and is easily accessible anywhere in the state; and

Whereas, utilization of OSIIS by all physicians would allow identification of underserved populations and areas of the state with low vaccination coverage; and

Whereas, utilization of OSIIS would also lead to increased vaccination coverage levels and thus result in decreased disease incidence; and

Whereas, the National Immunization Program, CDC, has set the goal of establishing a national immunization information system by the year 2000; now therefore be it

Resolved, that the Oklahoma State Medical Association encourages all physicians who administer immunizations to enter this information into Oklahoma State Immunization Information System (OSIIS).

Oklahoma State Immunization Information System

The Oklahoma State Immunization Information System (OSIIS) will furnish participating physicians with online access to immunization records of children immunized by any participating physician, clinic, or hospital. OSIIS will automatically determine a child's immunization status and list vaccines due at the time of the visit. Recall postcards are mailed to parents of children who are due or past due for immunizations on a monthly basis by OSDH.

The system will electronically generate all vaccine usage reports for Vaccines for Children Physicians and notify OSDH when vaccine inventories are low. Automatic notification will occur for staff to ship additional vaccine. Electronic assessment of immunization levels for each clinic is available with OSIIS.

Currently 155 health care sites are participating in OSIIS, including: 93 county health department sites, 27 private physicians/clinics, 8 Indian Health Service and tribal clinics, 1 military facility, 5 hospitals and 21 other public clinics and rural health clinics.

With private physicians administering a third of the vaccine to Oklahoma children, it is important to link immunization information from public clinics and private physician practices in one state wide database for information sharing. By the Year 2000, the national goal is to link state databases and share immunization information across state boundaries.

(NOT ADOPTED)

Resolution 10: Physician Recognition Program

(A-97)

Introduced by: Robert Mahaffey, MD, Chair, Council on Public and Mental Health

Referred to: Reference Committee II

Whereas, immunization is the most effective means of preventing vaccine-preventable diseases; and

Whereas, children less than two years

of age are especially vulnerable to complications from vaccine-preventable diseases; and

Whereas, in Oklahoma more than a fourth of two-year-olds are not fully protected from these diseases; and

Whereas, private physicians administer a third of the vaccine given to children in our state; and

Whereas, a software system developed by CDC (CASA) is available to determine the immunization coverage levels for two-year-olds in private clinics; and

Whereas, physicians whose clinics have attained a 90% immunization coverage level for their two-year-old patients deserve to be honored and recognized for their achievement; now therefore be it

Resolved, That the Oklahoma State Medical Association endorses the plan for the Oklahoma State Department of Health to recognize MDs for reaching the 90% immunization coverage level for two-year-olds by presenting them with a certificate; and be it further

Resolved, That OSMA will print the physicians' names in a special recognition area of the OSMA *Journal*; and be it further

Resolved, That OSMA will present to the American Medical Association House of Delegates a resolution encouraging the adoption of a similar plan in other states to recognize physicians who reach the 90% goal.

Physician Recognition Program

Private physicians in Arizona, South Carolina, Georgia, Iowa, Maine, Michigan, Ohio and New York are recognized for having a practice with a 90% immunization coverage level for their two-year-old patients. The assessment of their clinic's coverage level is performed using the CDC Clinic Assessment Software Application (CASA). The Immunization Corps in Oklahoma has been trained to use CASA to assess clinic levels and report findings to the OSDH Immunization Division.

This has proven to be a superb method in helping private physicians boost their clinic's immunization coverage levels. Studies have shown physicians usually believe their levels are 90% or higher, while the CASA assessments show they are in the 40% to 60% range.

As a reward to those physicians whose clinic levels are 90% or above, it is proposed that the Oklahoma State Department of Health present them with a certificate of achievement. It is also proposed that the OSMA print the physicians' names in a special recognition area of the OSMA *Journal*, and that the OSMA recommend the American Medical Association and its affiliates, to adopt a similar plan for recognizing physicians who reach the 90% goal.

With private physicians administering a third of the vaccine to Oklahoma children, it is important to recognize those physicians who have achieved a level of excellence in providing immunizations to children under two years of age.

(ADOPTED)

Resolution 11: Support of Breastfeeding

(A-97)

Introduced by: Robert Mahaffey, MD, Chair, Council on Public and Mental Health

Referred to: Reference Committee II

Whereas, it is scientifically recognized that breast milk is the nutritionally appropriate and immunologically protective food source that is most beneficial to the growth of infants during the first year of life; and

Whereas, breastfeeding provides economic and psychological advantages over bottle feeding; and

Whereas, fifty-five percent (55%) of women in Oklahoma breastfeed their babies in the early postpartum period; and

Whereas, the Healthy People 2000 objective is to increase to at least seventy-five percent (75%) the proportion of mothers who breastfeed their babies in the early postpartum period; and

Whereas, The American Academy of Pediatrics and American Academy of Family Physicians advocates breastfeeding as the optimal form of nutrition for infants; now therefore be it

Resolved, That the Oklahoma State Medical Association supports improved knowledge of health care providers about optimal infant nutrition, stressing the nutritional, immunologic, and other advantages of breast milk and the appropriate use of breast milk substitutes, making this knowledge available through education as a routine component of the curriculum for medical, nursing, and nutrition personnel, and a routine component of pediatric, family practice, and of obstetric residency training programs; and be it further

Resolved, That the Oklahoma State Medical Association supports parent education for all potential expectant and current parents on optimal infant nutrition, emphasizing the positive aspects of breastfeeding and the proper choice and utilization of breast milk substitutes; and be it further

Resolved, That the Oklahoma State Medical Association encourages professional and administrative hospital staff to examine their procedures for perinatal care, encouraging practices that are supportive of breastfeeding and discouraging those that are not; and be it further

Resolved, That the Oklahoma State Medical Association encourages physicians and all those with concern for healthy infants to work to improve the environmental support system for mothers after the method of feeding their infants has been chosen.

(ADOPTED)

Resolution 12: Women's Health

(A-97)

Introduced by: Robert Mahaffey, MD, Chair, Council on Public and Mental Health

Referred to: Reference Committee II

Whereas, the Oklahoma average age-adjusted Cardiovascular Disease Mortality rates for females for 1992-1994 is 217.2/100,000 and which is significantly higher than the U.S. rate of 135.6/100,000; and

Whereas, the Oklahoma average age adjusted Respiratory Cancer Mortality rates for females for 1992-1994 is 42.3/100,000 and which is significantly higher than the U.S. rate of 25.6/100,000; and

Whereas, the Oklahoma average age-adjusted Cervical Cancer Mortality rates for females for 1992-1994 is 3.0/100,000 and which is significantly higher than the U.S. rate if 2.6/100,000; and

Whereas, the Oklahoma average age-adjusted Breast Cancer Mortality rate for females for 1992-1994 is 22.2/100,000 and is above the U.S. rate of 22.0/100,000; and

Whereas, the Oklahoma average age-adjusted Diabetes Mortality rate for fe-

males for 1992-1994 is 20.6/100,000 is above the U.S. rate of 19.0/100,000; and

Whereas, many Cardiovascular Disease, Respiratory Cancer, Breast Cancer, Cervical Cancer and Diabetes deaths among Oklahoma women are premature and preventable deaths; and

Whereas, these deaths are costly to Oklahoma in productive families, in quality of life for middle years women, and in utilization of health care system resources; now therefore be it

Resolved, That the Oklahoma State Medical Association develop a collaborative relationship with First Lady Cathy Keating's Initiative and the Oklahoma Women's Health Network to further the mission of the network to promote, educate and heighten awareness of women's health issues statewide; and be it further

Resolved, That the Oklahoma State Medical Association educate and raise the awareness of the total population concerning diseases, prevention, risks, treatments for cardiovascular disease, cervical, breast and lung cancers, diabetes, depression, osteoporosis and menopause by collaborating with the Network in developing a statewide awareness campaign; and be it further

Resolved, That the Oklahoma State Medical Association raise the awareness of women's health issues among health care professionals by collaborating with the Network and the Women's Health Committees of the Oklahoma State Medical Association, and by offering a speaker's bureau on women's health; and be it further

Resolved, That the Oklahoma State Medical Association collaborate with the Network in providing resources and services availability throughout the state of Oklahoma; and be it further

Resolved, That the Oklahoma State Medical Association promote healthy living choices among women served; and be it further

Resolved, That the Oklahoma State Medical Association support the Oklahoma Consortium for Improving the Health of Oklahomans (OCIHO), whose Mission Statement is to improve the State of the State's Health by facilitating a reduction in disease, disability and premature death compared with the rest of the nation.

(ADOPTED)

Resolution 13: Men's Health

(A-97)

Introduced by: Robert Mahaffey, MD, Chair, Council on Public and Mental Health

Referred to: Reference Committee II

Whereas, the Oklahoma average age-adjusted Cardiovascular Disease Mortality rates for males for 1992-1994 is 193.8/100,000 and which greatly exceeds and is significantly higher than the U.S. rate of 187.4 /100,000; and

Whereas, the Oklahoma average age-adjusted Respiratory Cancer Mortality rates for males for 1992-1994 is 65.5/100,000 which is significantly higher than the U.S. rate of 42.2/100,000; and

Whereas, many Cardiovascular Disease and Respiratory Cancer deaths among Oklahoma men are premature and preventable deaths; and

Whereas, these deaths are costly to Oklahoma in productivity and in utilization of health care system resources; and

Whereas, the baby boomer aged male has reached 50 years of age in 1997 and this group will swell the aging society, there is a need for quality, healthy lifestyles; now therefore be it

Resolved, That the Oklahoma State Medical Association will develop a collaborative relationship with the Oklahoma State Health Department in developing a statewide awareness campaign; and be it further

Resolved, That the Oklahoma State Medical Association will promote, educate and heighten awareness of chronic diseases among males and to promote, educate and heighten awareness about health preventive behaviors and services; and be it further

Resolved, That the Oklahoma State Medical Association will educate and raise the awareness of the total population concerning diseases, prevention. Risks, treatments for cardiovascular disease, lung and prostate cancers, and diabetes by collaborating with a statewide awareness campaign.

Resolved: That the Oklahoma State Medical Association will raise the awareness of male health issues among health care professionals by collaborating with the Oklahoma State Health Department in providing a variety of professional education channels; and be it further

Resolved, That the Oklahoma State Medical Association will promote healthy living choices among males served; and be it further

Resolved, That the Oklahoma State Medical Association will support the Oklahoma Consortium for Improving the Health of Oklahomans (OCIHO), whose Mission Statement is to improve the State of the State's Health by facilitating a reduction in disease, disability and premature death compared with the rest of the nation.

(NOT ADOPTED)

Resolution 14: Unified Membership

(A-97)

Introduced by: G. Keith Smith, MD

Referred to: Reference Committee I

Whereas, Many physicians in the state prefer not to belong to the AMA; and

Whereas, Many physicians in the state wish to support county and state societies without belonging to the AMA; and

Whereas, Current policy gives the individual practitioner no choice but to pay the AMA dues if membership in county/state societies is desired; now therefore be it

Resolved, That the Oklahoma State Medical Association House of Delegates hereby repeal provisions in the Bylaws that require unified membership.

(NOT ADOPTED)

[See Substitute Resolution following Resolution 25]

Resolution 15: Oklahoma Health Care Authority As It Deals with Sooner Care

(A-97)

Introduced by: Ad Hoc Committee on Managed Medicaid

Referred to: Reference Committee III

[Certain portions of this resolution have been struck

from the record in accordance with a vote of the House of Delegates. The deleted material is available at OSMA headquarters.]

....*Resolved,* That the OSMA meet with the Legislative Oversight Committee to address these serious concerns and develop solutions; and be it further

Resolved, That the OSMA strongly recommends that member physicians contact their State Representative and Senator to inform them of these issues; and be it further

Resolved, The report of this Ad Hoc Committee is published in the OSMA *Journal* in order to inform members about the specific nature of the issues with the Managed Medicaid program, Sooner Care. [The complete report of the Ad Hoc Committee appears in the May/June '97 *Journal.*]

(NOT ADOPTED)

Resolution 16: Access to Sterile Syringes and Needles

(A-97)

Introduced by: Robert Mahaffey, MD, Chair, Council on Public and Mental Health

Referred to: Reference Committee II

Whereas, according to the Oklahoma Department of Mental Health and Substance Abuse Services, approximately 27, 210 Oklahomans are injection drug users (IDUs), and are at high risk of spreading HIV and STDs to others; and

Whereas, new IDUs will comprise the majority of newly acquired infections in Oklahoma; and

Whereas, multiple national and international studies have shown that Hepatitis B and C infections are common in populations at high risk of HIV, with all three infections most often occurring in injection drug users; and

Whereas, according to the HIV Epidemiologic Profile of Oklahoma, currently females who are IDUs or sexual partners of IDUs account for the majority of HIV infections in females; and

Whereas, epidemiological studies have demonstrated that cleaning needles with bleach does not provide a significant protection against HIV infections; and

Whereas, an impressive body of evidence suggests powerful effects from programs that provide sterile syringes, and that such programs show no change in drug activity or actually decrease drug use; and

Whereas, according to the recent Consensus Development Conference Statement of the National Institutes of Health, legislative restriction on programs that offer access to sterile syringes and needles must be lifted because they constitute a major barrier to realizing the potential of a powerful approach to HIV prevention and exposes millions of people to unnecessary risk: now therefore be it

Resolved, That the Oklahoma State Medical Association urges the Oklahoma health care professionals who educate the many publics about HIV prevention to seriously promote access to sterile syringes and needles as effective public health measures that reduce HIV infections and their associated health and social costs; and be it further

Resolved, That the Oklahoma State Medical Association sponsor legislation to urge the Oklahoma Legislature to repeal any legislation preventing access to sterile syringes and needles.

(ADOPTED AS AMENDED)

Resolution: 17: Reducing HIV/STD Transmission Through Consistent and Correct Condom Usage

(A-97)

Introduced by: Robert Mahaffey, MD, Chair, Council on Public and Mental Health

Referred to: Reference Committee II

Whereas, Sixty-five percent (65%) of all AIDS cases in Oklahoma have been attributed to sexual contact: and

Whereas, According to HIV Epidemiologic Profile of Oklahoma, HIV and other sexually transmitted diseases are acquired primarily during unprotected sex with an infected partner; and

Whereas, The highest rates of new infection for HIV and other sexually transmitted diseases continue to rise at a disproportionate rate for youth, women and people of color; and

Whereas, The House of Delegates of the AMA endorses the use of the condom as an effective method of prevention of venereal disease (Policy 440, 994, BOT Rep. T, A-74; Reaffirmed : CLR-PD Rep. C, A-89, Reaffirmed by CSA Rep. 3, A-95); and

Whereas, The recent Consensus Development Conference Statement of the National Institutes of Health calls for "sexual abstinence as a desirable objective" as well as "lifting constraints on condom availability"; now therefore be it

Resolved, That the Oklahoma State Medical Association urges the health care professionals to implement programs that encourage abstinence and that address information about HIV/STDs with an emphasis on the consistent and correct use of condoms; and be it further

Resolved, That the Oklahoma State Medical Association support programs that ~~promote~~ emphasize condom usage for people at risk of contracting HIV and other sexually transmitted diseases.

(NOT ADOPTED)

Resolution 18: Tobacco and School Publications

(A-97)

Introduced by: Robert Mahaffey, MD, Chair, Council on Public and Mental Health

Referred to: Reference Committee II

Whereas, the publication, *My Weekly Reader*, is published by K3, a subsidiary of the RJ Reynolds Tobacco Company; and

Whereas, My Weekly Reader is distributed widely to 8 and 9 year old children in the fourth grade and younger; and

Whereas, My Weekly Reader contains pro tobacco content 70% of the time, compared to a pro tobacco message of <25% prior to the K3 purchase; and

Whereas, The Scholastic News, another publication available to this age group has an anti-tobacco message; and

Whereas, the AMA's project to prevent smoking, The Extinguisher Man, is focused on this age group and is published in *The Scholastic News*; now therefore be it

Resolved, That the OSMA members,

with the OSMA Alliance members, work with the local school boards to distribute this information and report to the Board of Trustees.

(ADOPTED AS AMENDED)

Resolution 19: Tobacco Advertising

(A-97)

Introduced by: Robert Mahaffey, MD, Chair, Council on Public and Mental Health

Referred to: Reference Committee II

Whereas, smoking continues to be a growing problem among the children and adolescents of Oklahoma; and

Whereas, Oklahoma ranks 9th in the nation in deaths caused each year through smoking (more than 6000 deaths per year according to Centers for Disease Control statistics); and

Whereas, more Oklahomans die from the results of smoking than from accidents, homicides, suicides, AIDS, and alcohol combined; and

Whereas, tobacco manufacturers continue to deliberately mislead the public about the devastating impact their product has on the health of our people; and

Whereas, the tobacco companies have engaged in shameless public relation efforts that appeal to our children so that new generations of smokers will continue to buy their product; and

Whereas, Oklahoma taxpayers have picked up the tab for treating the diseases and health consequences of smoking; now therefore be it

Resolved, That OSMA sponsor and support legislation to limit advertising of tobacco products and to stop advertising which appeals to our children; and be it further

Resolved, That the OSMA members and the OSMA Alliance members work with local school boards to inform them of school publications that promote unhealthy life styles and substitute them with publications that encourage healthy life styles for young people.

(ADOPTED)

Resolution 20: Home Health Care

(A-97)

Introduced by: George W. Prothro, MD, Public Health Committee

Referred to: Reference Committee III

Whereas, the cost of home health care is a rapidly escalating component of Medicare costs; and

Whereas, the physician, in signing orders for such services and attesting to the fact that the services are necessary and the patient is home-bound, is assuming medical and legal responsibility for the accuracy of these statements; and

Whereas, in actuality the home health care plan for the patient is often developed by the home health agency and presented to the physician for his signature; and

Whereas, the physician, in signing orders for home health care, is usually not aware of the Medicare costs involved in the proposed plan and the possibility of other options that may be preferable for patient management and cost control; now therefore be it

Resolved, that the Oklahoma State Medical Association urge the Oklahoma State Department of Health to implement requirements that plans for home health care services developed by home health agencies for the physician's signature must include information to the physician as to the estimated monthly Medicare costs of the services being authorized; and be it further

Resolved, that the Oklahoma State Medical Association, through our congressional delegates, support efforts to prevent abuse of home health services under the Medicare program.

(NOT ADOPTED)

[See Substitute Resolution following Resolution 25.]

Resolution 21: Sooner Care Patients

(A-97)

Introduced by: Robert Mahaffey, MD, Chair, Council on Public and Mental Health

Referred to: Reference Committee III

[Certain portions of this resolution have been struck from the record in accordance with a vote of the House of Delegates. The deleted material is available at OSMA headquarters.]

....*Resolved,* that the OSMA meet with the Legislative Oversight Committee to address these serious issues and develop solutions; and be it further

Resolved, that the OSMA *Journal* publish the report of the Ad Hoc Committee*; and be it further

Resolved, that OSMA members contact their State Representatives and Senators to inform them of these issues and that any dollars saved from managed care should be reinvested in patient care....

(ADOPTED)

Resolution 22: Rabies Public Awareness Program

(A-97)

Introduced by: Robert Mahaffey, MD, Chair, Council on Public and Mental Health

Referred to: Reference Committee II

Whereas, rabies is a deadly disease transmitted to humans by unvaccinated or improperly vaccinated pets and/or wild animals; and

Whereas, in the United States last year more than 8,000 animals were diagnosed as having rabies; and

Whereas, this increase in rabies results in a significant public health risk; now therefore be it

Resolved, That the House of Delegates of the Oklahoma State Medical Association hereby endorses and agrees to participate in a Rabies Public Awareness Program under development by the Oklahoma Veterinary Medical Association; and be it further

Resolved, That the House of Delegates hereby requests that the OSMA Council on Public and Mental Health work closely with the Oklahoma Veterinary Medical Association on the aforementioned Rabies Public Awareness Program as well as on efforts to eradicate rabies in the state of Oklahoma.

*The report of the Ad Hoc Committee appears in full in the May/June'97 *Journal.*

Resolutions *(continued)*

(ADOPTED AS AMENDED)

Resolution 23: Biomedical Ethics

(A-97)

Introduced by:
Mary Anne McCaffree, MD, and the AMA Delegation

Referred to: Reference Committee H

Whereas, the AMA has established a Center for Biomedieal Ethics; and

Whereas, the resources available to the AMA membership from this Center are considerable; and

Whereas, ~~the~~ aecess to information on issues in biomedieal ethies sueh as managed care, distribution of searce resources and graduate medical education will be enhaneed with a working partnership with the AMA Center of Biomedieal Ethies and with the Oklahoma Bioethies Center at the Unversity of Oklahoma College of Medicine-Tulsa, including a telemedicine communieation with their "classroom"; and

Whereas, Oklahoma is a unified state with AMA membership; now therefore be it

Resolved, That the OSMA develop a telemedieine projeet jointly with the AMA ~~Bioethics~~ Center of Biomedical Ethics which will be made available to all OSMA members; and be it further

Resolved, That the OSMA refer this resolution to the AMA.

(ADOPTED)

Late Resolution 24: Survey of Oklahoma Health Plans

(A-97)

Introduced by: Organized Medieal Staff Section

Referred to: Reference Committee I

Whereas, Managed Care has been viewed as a way to make health care delivery more efficient; however the rise of managed care has often been accompanied by a gradual rise in non-medieal and administrative expenses; and

Whereas, many factors should be considered when consumers and physicians choose a health plan; and a compilation of information on HMO plans and costs is one way to provide a method to assess a health plans performanee and evaluate how health care premiums are being spent; and

Whereas, the data neeessary for sueh a eompilation is available from reports filed by various organizations, i.e., the Oklahoma State Health Department, the U.S. Seeurities and Exehange Commission, as well as current reports published by the plans themselves; therefore be it

Resolved, that the Oklahoma State Medical Association make available a summary report, modeled after the Knox-Keene Health Plan Expenditure Summary produced by the California Medieal Association, which would provide information on various for-profit and not-for-profit health plans in Oklahoma with a breakdown of information as follows:

- a listing of the full service and public pre-paid health plans in Oklahoma;
- listing of which plans are eontraeted with Medicare and Medieaid;
- the number of enrollees in various plans;
- total revenue vs. total premium spent on medical care;
- the highest and lowest medical loss ratios;
- the tax status of the various plans (for profit and not-for-profit);
- the number of physieians and hospitals under contraet by eaeh plan; and
- a geographical breakdown of where each plan in available; and be it further

Resolved, that the OSMA disseminate this report to the entire membership of OSMA by the most cost-effective means available; i.e., OSMA *Journal, OSMA News* or OSMA's website, OSMA Online.

(NOT ADOPTED)

[See Substitute Resolution following Resolution 25]

Late Resolution 25: Health Care Authority

(A-97)

Introduced by: East Central Oklahoma Medical Soeiety, by unanimous vote of the Society

Referred to: Reference Committee H

[Certain portions of this resolution have been struck from the record in accordance with a vote of the House of Delegates. The deleted material is available at OSMA headquarters.]

....*Resolved,* that the OSMA working in conjunetion with the state legislature seek to reorganize the Health Care Authority so as to reintroduce traditional values in medicine and work towards re-establishing the traditional patient-physieian relationship, and be it further

Resolved, that the new Health Care Authority allow patient choice of provider, both physician and hospital, and will engender responsibility in the patient, and be it further....

(ADOPTED AS AMENDED)

Substitute Resolution

[This resolution first combined, then the OSMA House of Delegates deleted, all the *Whereas*es and some of the *Resolved*s of the three original resolutions. In addition, the House of Delegates voted to strike from the record all the deleted material. The deleted text remains available at OSMA headquarters.]

....*Resolved,* That the OSMA meet with the Legislative Oversight Committee to address these serious issues and develop solutions; and be it further...

Resolved, That the OSMA *Journal* publish the report of the Ad Hoe Committee; and be it further

Resolved, That OSMA members contact their State Representatives and Senators to inform them of these issues and that any dollars saved from managed eare should be reinvested in patient eare...; and be it further

Resolved, That the OSMA working in conjunetion with the state legislature seek to reorganize the Health Care Authority so as to reintroduee traditional values in medicine and work towards re-establishing the traditional patient-physician relationship; and be it further

Resolved, That the new Health Care Authority allow patient choice of provider, both physieian and hospital, and will engender responsibility in the patient; and be it further...

Resolved, That the Oklahoma State Medieal Association instruct our Ameriean Medieal Assoeiation delegates to work with other states that have received a waiver from HCFA (Texas, Tennessee, Hawaii,

California) for managed Medicaid and inform HCFA that the waiver system has not demonstrated its objectives in improving care for patients.

[The report of the Ad Hoc Committee appears in full in the May/June '97 *Journal.*]

(ADOPTED)

Late Resolution 26: HIV Prevention Act of 1997

(A-97)

Introduced by: East Central Oklahoma Medical Society

Referred to: Reference Committee III

Whereas, HIV is a highly communicable infectious disease; and

Whereas, early detection and treatment has been shown to save infants born to infected mothers; and

Whereas, the AMA has adopted as policy the support of early testing and treatment of infants; and

Whereas, the AMA has gone on record as strongly supporting the HIV Prevention Act of 1997; now therefore be it

Resolved, that the OSMA go on record as also supporting the HIV Prevention Act of 1997; and be it further

Resolved, that the OSMA commend Congressman Tom Coburn and Senator Don Nickles for the introduction of this piece of legislation before the House of Representatives and the Senate respectively.

(ADOPTED)

Late Resolution 27: Insurance Coverage for Immunizations

(A-97)

Introduced by: OSMA Council on Public and Mental Health

Referred to: Reference Committee II

Whereas, Immunization represents one of the most cost-effective means of disease prevention; and

Whereas, lack of insurance coverage for immunization constitutes a significant barrier to protection from vaccine-preventable diseases; and

Whereas, the state of Oklahoma recently adopted a law requiring insurance companies to provide immunization coverage with no co-pays or deductibles; and

Whereas, nearly half of all states now have similar laws; now therefore be it

Resolved, that the American Medical Association endorses laws requiring insurance companies to provide coverage for immunizations with no co-pays or deductibles; and be it further

Resolved, that the American Medical Association urges states without such laws to adopt similar legislation.

(ADOPTED)

Late Resolution 28: Congressional Delegation to Support HR586

(A-97)

Introduced by: Board of Trustees

Referred to: Reference Committee II

Whereas, the physicians of Oklahoma are committed to promoting the best health for the people of Oklahoma and are the advocates for our patients; and

Whereas, the practice of medicine includes the commitment to diagnose and treat patients in a quality manner not based on their ability to pay; and

Whereas, some of the Managed Care and insurance contracts include a "gag-rule" requiring physicians to not reveal treatment and diagnostic options which are not included in their plan, even though it may be in the best interest of the patient; and

Whereas, there is now a Bill in the U.S. House of Representatives, HR 586, which requires the removal of the gag-rule from Managed Care and insurance contracts; now therefore be it

Resolved, that our Congressional Delegation be strongly encouraged to support HR 586; and be it further

Resolved, that Representative Steve Largent be strongly encouraged to remain an author on this bill.

(ADOPTED AS AMENDED)

Late Resolution 29: Expenses

(A-97)

Introduced by: Board of Trustees

Referred to: Reference Committee II

Whereas, HCFA has proposed arbitrary changes in the reimbursement payments to be made on the basis of practice expense relative values; and

Whereas, no entity—even HCFA—has been able to collect accurate data at this time that truly reflects the value of these practice expense values for all physicians; and

Whereas, whatever data that has been collected is considered by all, even HCFA authorities, to be flawed; now therefore be it

Resolved, that the OSMA House of Delegates direct its AMA delegation to work to influence the AMA to actively oppose the implementation of the currently proposed and published HCFA practice expense components of the Medicare resource based relative value scale; and be it further

Resolved, that the AMA urge HCFA to employ a basic, simple survey form developed in collaboration with the AMA which could better estimate true practice expenses of all physicians.

(ADOPTED)

Resolution of Commendation Jerry B. Vannatta, MD

Introduced by: Board of Trustees

Whereas, The medical professional has historically supported the Dean of the University of Oklahoma School of Medicine; and

Whereas, Oklahoma physicians have been especially appreciative of the outstanding job Dr. Jerry Vannatta has been performing as Interim Executive Dean of the University of Oklahoma School of Medicine; now therefore be it

Resolved, That the physician members of the Oklahoma State Medical Association commend Dr. Jerry B. Vannatta for his excellent leadership and his dedication to medical education.

(ADOPTED)

Resolution of Commendation Leo Meece, MD

Introduced by: Board of Trustees

Whereas, Dr. Meece has been an active member in good standing of the

Resolutions *(continued)*

Oklahoma State Medical Asociation for over 35 years; and

Whereas, Dr. Meece has been a great civic leader and representative of medicine in his community; now therefore be it

Resolved, That the members of the OSMA would like to express their sincere appreciation to Dr. Leo Meece for his exceptional example to the practice of medicine in Oklahoma.

(ADOPTED)

Resolution of Commendation J. Ross Vanhooser, MD

Introduced by: Board of Trustees

Whereas, It is a physician of special dedication who will take time from a busy practice to work to advance the practice of medicine; and

Whereas, J. Ross Vanhooser, MD, exhibited this special dedication by providing Oklahoma physicians with effective representation nationally in the American Medical Association House of Delegates; now therefore be it

Resolved, That the physician members of the Oklahoma State Medical Association commend and thank their friend and colleague, Dr. J. Ross Vanhooser, for his service as a member of the Oklahoma Delegation to the American Medical Association from 1995 to 1997.

(ADOPTED)

Resolution of Commendation William O. Coleman, MD

Introduced by: Board of Trustees

Whereas, It is a physician of special dedication who will take time from a busy practice to work to advance the practice of medicine; and

Whereas, William O. Coleman, MD, exhibited this special dedication by providing Oklahoma physicians with effective representation nationally in the American Medical Association House of Delegates; now therefore be it

Resolved, That the physician members of the Oklahoma State Medical Association commend and think their friend and colleague, Dr. William O. Coleman, for his service as a member of the Oklahoma Delegation to the American Medical Association from 1984 to 1997.

(ADOPTED)

Resolution of Commendation Lyle R. Kelsey, CAE

Introduced by: Board of Trustees

Whereas, Lyle Kelsey, after 18 years of service to the Oklahoma State Medical Association, is leaving our Association to be the Executive Director of the Oklahoma State Board of Medical Licensure and Supervision; and

Whereas, Mr. Kelsey has been the staff executive in charge of the Council on Member Services, Medical Services, and State Legislation, concerned with worker's compensation, insurance legislation, and tort reform, and Mr. Kelsey was instrumental in establishing the Commission on International Medical Graduates; and

Whereas, Mr. Kelsey was instrumental in effecting major legislative changes, serving as staff leader on two Tort Reform Task Groups; and

Whereas, Mr. Kelsey has acted as an independent insurance agent for the Oklahoma State Medical Association and PLICO since 1992, which has resulted in over $1,300,000 in commissions retained by PLICO; now therefore be it

Resolved, That the physician members of the Oklahoma State Medical Association commend Lyle Kelsey for his excellent leadership, work, and support for Medical Doctors in the State of Oklahoma and also show appreciation for his tireless efforts for the past 18 years.

REFERENCE COMMITTEE I

REPORT OF REFERENCE COMMITTEE I

(A-97)
Presented by: J. Chris Carey, Chair

Mr. Speaker and Members of the House of Delegates:

Reference Committee I gave careful consideration to the several items referred to it and submits the following report:

(1) Report of the Board of Trustees
Recommendation:
Mr. Speaker, your Reference Committee recommends to accept the Report of The Board of Trustees with the following amendment which will reflect in further reports:

The changing of the title Chief Executive Officer to Executive Director, and remit back to the Board of Trustees a way of developing a policy manual and organization hierarchy for and including the Executive Director.

(2) Report of the Council on Long Range Planning & Development
Recommendation:
Mr. Speaker, your Reference Committee recommends to accept the Report of the Council on Long Range Planning & Development with the following amendments to read:

Goal 2
2.2 Promote DO membership

(3) Report of the Secretary-Treasurer
Recommendation:
Mr. Speaker, your Reference Committee recommends to accept the Report of The Secretary-Treasurer with the following amendments:

Page three of the 1997 revised budget to include the funding for the Oklahoma Centralized Verification Organization of $50,000, and to increase the amount allocated for the Executive Director Search to $50,000.

(4) Resolution 1: Fee Splitting
Recommendation:
Mr. Speaker, your Reference Committee recommends that Resolution 1 *not* be adopted and that the Oklahoma State Medical Association follow the guidelines recommended by the AMA concerning fee splitting.

(5) Resolution 6: Changes in the OSMA's bylaws to approve membership privileges in the Association for Osteopathic physicians.
Recommendation:
Mr. Speaker, your Reference Committee recommends to accept Resolution 6 with amendments to read:

Resolved, that the House of Delegates of the Oklahoma State Medical Association approve the appropriate changes in the OSMA bylaws to approve membership privileges in the Association for Osteopathic Physicians.

(6) Resolution 14: Unified Membership
Recommendation:
Mr. Speaker, your Reference Committee recommends that Resolution 14 *not* be adopted.

Consent Calendar

Recommended for Adoption:

(7) Membership Report
Report Adopted

(8) Resolution 3: AAMSE's 50th Anniversary
Resolution Adopted

(9) Late Resolution 24: Organized Medical Staff Section—State Survey
Late Resolution Adopted

Filed For Information:

(10) Report of the Appropriations and Audit Committee
Report is filed for information

(11) Supplemental Report of the Board of Trustees
Report is filed for information

(12) Report of the OSMA Employee Pension Plan
Report is filed for information

(13) Report of the OSMA Alliance
Report is filed for information

(14) Report of the Physicians Liability Insurance Company (PLICO)
Report is filed for information

(15) Report of the President
Report is filed for information

Mr. Speaker, your Reference Committee recommends adoption of the Report of Reference Committee I as a whole.

Mr. Speaker, this concludes the Report of Reference Committee I. Your Reference Committee wishes to thank all who participated in the hearing and contributed to the preparation of this report. As Chairman, I would like to thank the other Reference Committee members and OSMA Staff, Kathy Musson and Barbara Matthews.

Respectfully submitted,
J. Chris Carey, MD, Oklahoma City
Matthew Britt, MD, Oklahoma City
Susan Harmon, MD, Oklahoma City
Barbara Hastings, MD, Tulsa
David Griffiths, MD, Tulsa
Robert A. Phillips, MD, Tulsa
Kathy Wyant, MD, McAlester
Ashley Roberts, MSIII

REPORT OF THE AUDIT AND APPROPRIATIONS COMMITTEE

Reference Committee I (A-97)
Subject: Annual Audit
Presented by: James Gerber, MD, Chair
Referred to: Reference Committee I

Introduction
The Appropriations and Audit Committee is listed in the OSMA Bylaws, as amended through April, 1996, as one of the Association's standing committees. Chapter X, Section 8.00 states:

Reference Committee I *(continued)*

"Three members of the Board of Trustees shall be appointed by the President to serve as committee on Appropriations and Auditing. This committee shall be responsible for the annual audit of accounts of the Association."

Review of Activities
As indicated in Resolution #30, adopted at the 1996 Annual Meeting of the OSMA House of Delegates, the resolve stated that the OSMA and PLICO change the auditing firm to Ernst & Young for the 1996 tax year.

In October an engagement confirmation letter was signed and returned to Ernst & Young and throughout the month of January, an in-depth audit was performed in-house by personnel from the Ernest & Young firm's Dallas office. A copy of the audit is included in the financial portion of the Delegate's handbook.

Conclusion
The transistion from the previous auditing firm to Ernest & Young has been successfully completed and the Appropriations and Auditing Committee met on March 24, 1997, to review and approve the 1996 annual audit with representatives from Ernst & Young. A letter from Ernst & Young, dated February 27, 1997, states in part:

"In our opinion, the 1996 financial statement referred to above presents fairly, in all material aspects, the financial position of Oklahoma State Medical Association, as of December 31, 1996, and the results of its operations and its cash flows for the year then ended in conformity with generally accepted accounting principles."

The committee recommends the continued use of the Ernst & Young firm to perform the 1997 annual audit.

Respectfully submitted,
James S. Gerber, MD
Roland A. Walters, MD
Wallace C. Hooser, MD
Carol Blackwell Imes, MD
David M. Selby, MD

REPORT OF THE BOARD OF TRUSTEES

Reference Committee I (A-97)
Subject: Annual Report
Presented by: Robert J. Weedn, MD, Chair
Referred to: Reference Committee I

Introduction:
The OSMA Board of Trustees has completed three of its regular quarterly meetings for the organizational year 1996-97. The fourth quarterly meeting or Annual meeting of the Board is being held in conjunction with the 1997 Annual Meeting of the OSMA. The proceedings of the Annual Board meeting will be contained in a Supplemental Report of the Board of Trustees.

During the past year the Board met in regular sessions on July 14, 1996, October 13, 1996, and January 12, 1997, in Oklahoma City. A quorum was certified for each meeting. Due to time and date conflicts, the Board of Trustees did not meet at any alternate locations, but the Board would like to reaffirm the concept of holding the meetings at other locations to allow members from different areas of the State to attend Trustee meetings.

Council and Committee Reports:
During each of its meetings, the OSMA Board of Trustees received reports from the Association's various Councils, Committees, and Special Sections. As these entities also report directly to the House of Delegates, they will not be reported here except for special action taken by the Board and reported below.

PLICO, OFMQ, and Alliance Reports:
Throughout the year, the Board of Trustees heard reports from PLICO, OFMQ, and the OSMA Alliance. As these organizations report directly to the House of Delegates, they will not be reported here.

OSMA Personnel:
Personnel changes have been a major source of concern for the Board of Trustees. In this regard, long-term employees Debbie Thurmond and Bobbie Brown left the OSMA. Lyle Kelsey, Associate Director who had been with the Association for 18 years, has resigned to become the Executive Director of the Board of Medical Licensure. In addition, this year's new Executive Director resigned in January and as a result, your Board has established a search committee consisting of Chair David M. Selby, MD; and Drs. David L. Harper, Tulsa; Robert J. Weedn, Duncan; Richard Martin, Pryor; W.F. Phelps, Tulsa; Boyd O. Whitlock, Tulsa; Norman K. Imes, Roger Sheldon, Rebecca Tisdal and Sara DePersio, Oklahoma City. Dr. Gordon Deckert, Oklahoma City will serve as consultant at will.

The Committee is in the process of selecting a National Search Firm to identify and hire a new Executive Director with the administrative ability and expertise to implement our Mission and goals into the 21st century. It is the Trustees' expectation that the search will be completed in the fall.

On a more positive note your Board and President has made representation at the State Legislature a high priority. In this regard, Vickie White Rankin was hired as our full time Political Affairs Director, and Lynne White has been retained to work with her on a contract basis. Both have extensive experience with our State Legislation. They are working effectively with Dr. Brandt and the Council on State Legislation at the State Capitol.

Relationship of OSMA with Osteopathic Physicians:
Your Executive Committee met with the leadership of the Osteopathic Association to explore the concept of opening OSMA membership to the Osteopathic Physicians. At this time the Osteopathic leadership is not supportive and would not welcome such a move. It should be noted that PLICO has started to provide malpractice Insurance to Osteopathic Physicians although the Osteopathic Association did not endorse PLICO as had been anticipated. Further study of Osteopathic membership is being handled by the Council on Long Range Planning & Development.

Continuing Medical Education:
In light of an initiative of the State Legislature to mandate yearly Continuing Medical Education (CME), your Association worked successfully to modify the initiative so that CME certification will be part of the licensure requirements and completed in a much more appropriate and practical manner for our membership than was envisioned initially by the Legislature.

Oklahoma Centralized Verification Organization (OCVO):
Your board approved a fifty thousand dollar investment in a joint venture with the OCVO (a wholly owned service operated by the Tulsa County Medical Society) to expand that organization as a statewide physician controlled credentials verification organization that should ultimately be quite beneficial to our membership.

Physician Recovery Program:
J. Darrel Smith, MD, Director of the Physicians Recovery Program since 1985, retired this year. Associate Director Harold Thiessen, MD, has been appointed as Interim Director by President David L. Harper, MD. Dr. Smith will receive a special commendation at the Annual Meeting. A search committee is to be established to identify a permanent replacement for Dr. Smith.

Oklahoma Board of Medical Licensure and Supervision:
The OSMA continues to provide support for the Optometry lawsuit. In addition there has been a continuing effort to enhance liaison with the State Board of Medical Licensure and the appointment of Lyle Kelsey as Executive Director of that board should greatly reinforce that effort.

OSMA Headquarters Maintenance:
A modest remodeling project begun two years ago was completed this year: in addition the hail damaged roof of the OSMA and annex building were replaced along with the heating and air for both buildings. The computer system upgrade was also completed.

Council on Long Range Planning & Development:
After a five-year hiatus, the Long Range Planning and Development Council was re-activated and made a priority this year. Under the leadership of Mary Anne McCaffree, MD, this council had a retreat in early January and a follow up in March; this effort has resulted in a revised Mission Statement and definition of goals and initiatives for your OSMA. Pending approval by the House of Delegates, it is your Board of Trustees' intention that this effort will provide a well defined focus for our organization next year and that this planning process will become an annual update and revision.

Medicaid Managed Care:
In response to the House of Delegates resolution to access Medicaid managed care, Dr. Ed Brandt has chaired a committee to study managed care as a whole. In addition, an Ad Hoc Committee to study the issues of the Oklahoma Health Care Authority and Sooner Care was established and the report is filed separately. The Fairness in Managed Care Act, HB 1416, which has passed the Oklahoma House of Representatives and is now being heard in the Senate, is to provide protection for both patients and physicians by insuring fairness in dealing with managed care organizations.

Annual Meetings:
Your Board of Trustees has voted to drop Shangri-La from the rotation. It is the chairman's hope that every third year the Annual Meeting could be held in an alternate location.

Membership Actions:
During the past year, the Board of Trustees voted to allow a dues reduction or dues exemption for a total of 18 physicians. Three members were granted affiliate membership status.

Life Membership:
During the past year, 17 OSMA members have applied for Life membership in the association through application from their component county medical societies and have been approved by the Association's Board of Trustees. Life membership will be awarded to these members with the approval of the House of Delegates this year. These physician members are as follows:

Joseph LeBlanc, MD, Bartlesville
Charles Chediak, MD, Oklahoma City
Donald R. Inbody, MD, Tulsa
V. Lee Vinyard, MD, Bartlesville
Mary Abbott, MD, Norman
Williard Aronson, MD, Oklahoma City
John H. Carney, MD, Oklahoma City
Frank A. Clingan, MD, Tulsa
Timothy Dennehy, MD, Tulsa
Jack D. Shirley, MD, Oklahoma City
James B. Silman, MD, Norman
J. Darrel Smith, MD, Norman
Robert R. Sullivan, MD, Norman
Robert Troop, MD, Ardmore
Guy W. Fuller, MD, Oklahoma City
Sopon Nakpairat, MD, Ardmore
Kenneth R. Scivally, MD,
Oklahoma City

Respectfully submitted,
Robert J. Weedn, MD, Chair,
Board of Trustees

SUPPLEMENTAL REPORT OF THE BOARD OF TRUSTEES

Reference Committee I (A-97)
Subject: Annual Report
Presented by: Robert J. Weedn, MD, Chair
Referred to: Reference Committee I

The Board of Trustees met at its Annual Meeting, April 24, 1997, at 1:30 p.m. at the Tulsa Southern Hills Marriott. This Supplemental Report reviews actions taken by the Board during the meeting. The report will be referred to Reference Committee I for consideration, along with the Annual Report of the Board of Trustees, which is in the Delegates' handbook.

After introductions the minutes of the January 12, 1997, were approved with minor clarification changes.

In the Report of the President, Dr. Harper first acknowledged Dr. Sara DePersio for her work in the area of Public Health, he then gave an overview of the past year and made reference to the greatly increased Legislative work done this year. Dr. Harper recommend-

Suppl. Board of Trustees *(cont.)*

ed training someone to fill Mr. Kelsey's role as a licenced insurance agent in light of his departure. Dr. Harper requested that the Board of Trustees study information that was presented by Dr. Seradge to see if the Board would want OSMA to become a co-plaintiff with him in his lawsuit against Blue Cross & Blue Shield. Dr. Harper expects a smooth transition for Dr. Selby and thanked the Board for all their support during the year.

In the report of the President-Elect, Dr. Selby reported on the recommendations by the Personnel and Finance Committee, and Executive Committee regarding staff salary increases. The Board of Trustees approved these recommendations.

Dr. Selby also presented information concerning the CEO search committee and its recommendation to retain a National Search firm. A request was made from the Committee to the Board of Trustees for an allowance of $50,000 for the CEO search process, which the Board approved.

Carol Imes, MD, presented the Report of the Secretary-Treasurer, the Annual Audit Report from Ernst & Young, and the 1997 revised annual budget and the first quarter financial statement.

Adjustments of the 1997 Annual Budget was made to reflect the approval of the request for $50,000 for the CEO search, versus the $15,000 approved in January. Dr. Imes did report that in a recent re-evaluation of the Defined Benefit Pension Plan, the underfunded amount had been recalculated at approximately $86,000, which is much less than the original $160,000 in the 1997 budget.

The Board accepted the report and revised budget.

Floyd Miller, MD, presented a preview of the full PLICO Annual Report.

The Board approved the several resolutions of commendation to member physicians for their service.

Dr. Weeden then introduced Dr. Ray V. McIntrye, MD, Editor in Chief of the OSMA *Journal*. The Board approved the recommendation by the *Journal* to change the publication to bi-monthly, at least temporarily, due to the decrease in the number of manuscripts. It is the intent of the Board to study future directions for the OSMA *Journal*.

The Board also approved the appointment of Ray V. McIntrye, MD, as Editor and Ruth H. Oneson, MD, J. Michael Pontious, MD, David M. Selby, MD, Clifford G. Wlodaver, MD and J. Michael McGee, MD, as Associate Editors.

The Board received the report of the Alliance by President Barbara Jett.

Mary Anne McCafree, MD, Chairman of the Long Range Planning & Development Council, presented the Councils report.

The Mission Statement and Goals were reviewed noting the strategic initiatives for all seven goals. This is a work in progress and will be modified yearly. Motion was made to accept the report and forward to the House of Delegates.

Dr. McCaffree, also presented a report of the Ad Hoc Committee on Managed Medicaid. The report contains minutes from the meeting along with reports from Dr. Thomason, Dr. Stratton, and the Children's Clinic. Dr. McCaffree noted that it will be extremely important to collect data concerning the Health Care Authority. Dr. Splinter and Dr. Mitchell from the Health Care Authority have been invited to participate in the Reference Committees. A suggestion was made to present for publication copies of the materials handed out, in a future OSMA *Journal* issue. Resolutions submitted to the House of Delegates will support the efforts by the Ad Hoc Committee. The Committee's report was accepted by the Board of Trustees.

Dr. Michael Clendenin, President of Tulsa County Medical Society, was called upon to discuss the report submitted by the Oklahoma Centralized Verification Organization (OCVO). Comments were made concerning the future of the organization in light of AMA initiatives. A request for $50,000 additional funding was made to the Board and after extensive discussion approved. It is the opinion of the Board that ultimately OCVO can have great member service value just as PLICO has.

The Report on the Council of Legislative Affairs was presented by Vickie White Rankin, noting that the Legislative Session has been tremendously successful this year. At the request of the Chairman of the Council the Board took specific action concerning two issues. The Board voted not to endorse Certificate of Need Legislation and the Board authorized Dr. Brandt and the Council to meet with the Board of Pharmacy to discuss issues of mutual concern as long as compliance with Oklahoma State Medical Associations Mission Statement was maintained.

The Report of the Council on Governmental Activity was given by Dr. Gregory. Specific discussion centered around Congressman Largent's withdrawal as an author on HR 586, The Managed Care Act of 1997, because of the "gag rule" issue. A Late Resolution from the Board was approved encouraging his resumption of authorship of the Managed Care Act.

Dr. Gregory also addressed the OMPAC report to the House of Delegates and commented on the need for bylaws updates and OMPAC's plans to increase physician participation across the State.

Dr. Gregory also presented a report to the Board on the activities of the Federation Coordination Team of which he is the Chairman. The Trustees approved a grant to the FCT of $1500.00.

Dr. Gregory discussed the Hassle Factor log, implemented by the Texas Medical Association and a recommendation was made by the Board of Trustees to support this issue by drafting a Late Resolution for the House of Delegates.

The Board received the report from Kathy Musson, Acting Executive Director, which included an update on current projects, specifically the Board approved the purchase of a new telephone system with voice mail

Harold Thiessen, MD, recently named Interim Director of the Physician Recovery Program updated the Board on the current status of the program.

Special and life membership requests, for the quarter were reviewed and approved by the Board.

The Membership Coordinator Report was submitted to the Board reporting on the survey of rural county soci-

eties opinion on the use of the OCVO application for use as OSMA's membership application. The report indicated the County Societies response to the survey overwhelmingly supported the use of OSMA's current membership application. The Board decided to continue use of the current OSMA membership application at this time.

The Board approved Late Resolutions 24, 25, 26, and 27, for consideration by the House of Delegates.

The Board of Trustees considered a request from the Oklahoma Chapter of the American Academy of Pediatrics for a $1,000 donation to support the cost of underwriting Judge Gill's honorarium. Motion was made, seconded and passed to support the OCAAP with a $1,000 donation.

Finally, the Board elected W.F. Phelps, MD, Tulsa, as Chair of the OSMA Board of Trustees, and Robert Phillips, MD, Stillwater, as Vice Chair, they were elected by acclamation.

The Board of Trustees adjourned at 5:52 p.m.

REPORT OF THE COUNCIL ON LONG RANGE PLANNING AND DEVELOPMENT

Reference Committee I (A-97)
Subject: Annual Report
Presented by: Mary Anne McCaffree, MD, Chair
Referred to: Reference Committee I

Introduction:
The Council on Long Range Planning will study and make recommendations to the Board of Trustees and the House of Delegates concerning the long range objectives of the Association, and will assess and make recommendations regarding the resources and programs necessary to reach those objectives

Review of Activities:
The Long Range Planning & Development Council met by telephone conference on Monday November 11, 1996; with facilitator Gary Richetto, PhD on Saturday, January 11, 1997; and Saturday March 8, 1997.

The November 11th teleconference prompted the Council to survey the membership on issues that were of concern. The surveys were then given to the facilitator, Dr. Gary Richetto for his review prior to the January 11th meeting. The Mission Statement and goals were developed at the January meeting along with the initiatives for goals 3 and 4. These items were published in the *Week in Review* and the *OSMA News*. The Committee met on March 8th to finalize the strategic initiatives for the remaining goals. The draft of the Mission Statement, Goals, and Initiatives are attached for approval and discussion by the Board of Trustees and House of Delegates.

The Committee Chair would like to recognize all the Members for the commitment of time and hard work involved in completing an important step for the Association. The Committee would also like to thank the staff for their participation and committment.

A record of all minutes beginning in 1986 to present will be kept at the OSMA Headquarters, along with results of all surveys sent out by the Committee.

Respectfully submitted,
Mary Anne McCaffree, MD, Chair
Jay Gregory, MD
David L. Harper, MD
David M. Selby, MD
Carol B Imes, MD
Boyd O. Whitlock, MD
Robert J. Weedn, MD
Roger Sheldon, MD
William Bernhardt, MD
Richard Boatsman, MD
John Alexander, MD
Michael Haugh, MD
Ed Brandt, Jr., MD
Ron Kreger, MD
K. Mehta, MD
Norman Dunitz, MD
Gary Strebel, MD
William O. Coleman, MD
W. Frank Phelps, MD
William Hall, MD
Patrick Lester, MD
J. Ross Vanhooser, MD
Greg Ratliff, MD
Bruce Storms, MD
Robert Mahaffey, MD
Jack Beller, MD
Chester Bynum, MD
Perry Lambird, MD
Clarence Robison, MD
Sara DePersio, MD
Kathy Musson, Staff
Shirley Burnett, Staff
Lyle Kelsey, Staff
Lynne White, lobbyist
Barbara Matthews, Staff

[Complete text of the Mission Statement and goals appears elsewhere in this issue of the *Journal.*]

REPORT OF THE OSMA PENSION PLAN COMMITTEE

Reference Committee I (A-97)
Subject: Annual Report
Presented by: C. Terrence Dolan, MD, Chair
Referred to: Reference Committee I

Introduction
The Board of Trustees of the Oklahoma State Medical Association voted to freeze the accruals on the OSMA Employee Pension Plan (OSMAEPP) in December of 1992. Since that time the pension plan committee set out a five (5) year plan of conservative investment strategy to ensure the account funds are safe and still maintain reasonable growth until the final termination of the plan and disbursement of funds to each qualified employee takes place around May 31, 1997.

Review of Activities
In order for the Pension Plan Committee to ensure that the plan assets were secure and not subject to decrease, the committee transferred all assets in to treasury bills (T-bills) in June of 1996. This conservative approach has resulted in moderate asset growth, increasing the market value from $661,229.69 in February 1996 to $702,618.90 as of the last reportable quarter ending February 28, 1997, according to The Trust Company of Oklahoma. Below are the returns this transfer has produced over the last few quarters:

Pension Plan *(continued)*

Total Allocation Returns by Quarter	
Dec 95 - Feb 96	+4.17%
Mar 96 - May 96	+4.64%
June 96 - Aug 96	+1.33%
Sep 96 - Nov 96	+1.64%
Dec 96 - Feb 97	+1.29%

To date, the necessary documentation has been filed within the required time frame in order to proceed with the scheduled plan termination. The following is the current filing schedule:

Date, Task, Responsible Party, and Date Completed:

08-16-96. IRS notice & PBGC notice of plan benefits provided to plan participants. OSMA/FBD.* 08-14-96.

08-30-96. Termination documents sent to IRS & PBGC (deadline 09-30-96). OSMA/FBD. 09-25-96.

12-31-96. Form 5500 due to IRS & PBGC for plan year 05-31-96. OSMA. 12-17-96.

02-17-97. PBGC Form 1 due for plan year beginning 06-01-96. OSMA. 01-02-97.

03-97. IRS Determination Letter—approval to terminate plan. IRS. 3/24/97.

04-97. Furnish distribution election forms to plan participants. OSMA/FBD. In process.

05-97. 180-day deadline for distribution to plan participants. OSMA.

06-97. Form 501 due to the IRS 30 days after distribution to plan participants. OSMA.

12-31-97. Form 5500 due for plan year ended. 05-31-97. OSMA.

02-16-98. PBGC Form 1 due for plan year beginning 06-01-97. OSMA.

*Fringe Benefits Design plan actuaries

During 1996 and the first quarter of 1997, several OSMA employees have terminated employment and they have requested to exercise their options under the defined benefit pension plan. They have all received or are in the process of receiving information about their plan benefits and rights under the plan. The employees with an asterisk have received their distribution of plan funds.

Name	Termination date
Kenneth Edward Kelsay	12-31-95
Claudia Kamas*	02-15-96
Susan (Meeks) McDonald*	03-12-96
David Bickham	04-30-96
Debbie Thurmond*	11-18-96
Bobby Brown*	12-20-96
Mike Sulzycki	01-13-97

On October 17, 1996, Mr. Ken Culver, Senior Vice President, Fringe Benefits Design, of the Oklahoma City office, came to the OSMA office and spoke to the OSMA Employees collectively and individually about the pension plan and answered questions about their benefits and rights under the plan.

When the OSMA Defined Benefit Distribution Election Forms are received from all the plan participants in April of 1997, Trust Company of Oklahoma, Plan Trustee, will tabulate all the information and determine the amount the plan is under funded. The OSMA at that time will need to contribute the under funded amount to the plan trustee so the distributions can be made to the plan participants for final termination of the Defined Benefit Plan. OSMA has budgeted $160,000 toward the pension plan deficit.

Respectfully submitted,
C. Terrence Dolan, MD, Chair
William Bernhardt, MD
David Browning, MD
David Selby, MD

REPORT OF THE OKLAHOMA STATE MEDICAL ASSOCIATION ALLIANCE

April 25, 1997

My theme this year was "Yes, We Can!" Alliances across the state truly did exhibit a positive attitude and make a difference in membership, legislation, violence prevention and in AMA-ERF.

Our membership team consisted of three chairmen who worked on recruitment and retention in their area. One member worked with the established county memberships, one with the MALs, and one with the RPS/MSS members. Our RPS/MSS chairman asked Alliance members from across the state to sponsor RPS/MSS members on a state and national level so they could be receiving the state and national publications.

Our legislative chairman, Sherry Strebel, kept us informed on the House and Senate bills by sending out a newsletter called Legislative Express. She organized legislative desserts and invited the legislators representing a district to meet and discuss issues in a small, informal setting with physicians and physician spouses. Everyone who attended these small group discussions thought it was time well spent and were surprised to hear how much their legislators did not know about medicine.

Alliances across the state participated in the "Save Today" program. We distributed "Hands Are Not for Hitting" to grade school children, promoted and donated "I Can Choose," "I Can Be Safe," and "Be a Winner, Shape Up for Life" to third-grade students, adopted shelters, held shelter showers, and had three Kitchen Tours (OKC, Tulsa, and Ardmore) to raise money for medical equipment for the Child Abuse and Response Center and to donate to violence prevention activities.

Our AMA-ERF sharing cards, Christmas card sales, memorials, honorariums, and a "Make It, Bake It, Grow It, Sew It, Show It" auction helped to raise money for AMA-ERF.

We sent eight county presidents-elect to Confluence I and II for three days of leadership training. All of them found it to be a very worthwhile experience and said it was the best kept secret of the Alliance.

The Health Education Foundation, a Foundation of the OSMAA, awarded scholarships to two junior nursing students. The scholarships will be presented at the House of Delegates on April 25, 1997.

The Alliance appreciates the support of the OSMA staff and membership. By working together we can accomplish our goals and have an opportunity to make a difference. We appreciate the OSMA including the Alliance President on the PLICO Board and a sub-committee, Council for Long Range Planning, Council for Legislation and Regulation, and the OSMA Board of Trustees.

Traveling to the counties has been a most rewarding experience. Doris Edge and I presented information and ideas on membership recruitment and reten-

tion, AMA-ERF, legislation, and health promotion. We have such great talent in our state, and it was a pleasure to witness the great projects on family violence, teen pregnancy, substance abuse, and healthy lifestyle promotion. "Yes, We Can"—and did educate, legislate, and contributed our time and talents to make a healthier Oklahoma.

Barbara Jett, OSMAA President

REPORT OF THE PHYSICIANS LIABILITY INSURANCE COMPANY

April 1997

Dear Trustee:

In 1996, PLICO billed $36,000,000 of professional liability insurance premiums. In 1997, that sum grew to $40,300,000. In 1996, PLICO insured 4,129 doctors. In 1997, PLICO is insuring 4,126 doctors. Although there have been strenuous efforts on the part of many different competing entities to erode the base of PLICO insureds, the impact has been negligible. This year, 132 physicians under contract with corporations were required to utilize the services of a claims-made insurer. However, PLICO offset the loss of insureds through its expansion into the osteopathic physician's market.

PLICO's success in retaining its insureds in the face of strenuous competitive efforts is indicative of the high level of understanding among Oklahoma physicians of the advantages offered us through our association-owned insurance company.

We know that if PLICO is gone, the competition's premiums will skyrocket. Osteopathic physicians learned that lesson years ago.

We are aware that the coverage offered by PLICO is worth three or four times what the competition is offering based upon the competition's own assessment of the cost of "Tail Coverage."

We know that the competing insurance policies are claims-made and have premiums that increase every year for five years. At the end of five years the insured would have to buy the "Tail" in order to make the claims-made policy equivalent to our PLICO policy.

We understand that PLICO operates as a nonprofit insurer. Its premiums are those necessary to guarantee the security of all of us in the event of losses and meet the requirements of Oklahoma regulators.

We understand that with PLICO, should we have the misfortune of experiencing claims, we will be judged by our peers and not by an underwriter somewhere in the East who sees only numbers and cannot relate to the difficult challenges of our profession nor understand the problems we face.

As I complete my first year as chairman of PLICO, I look back on the myriad challenges that we have faced in this time of great turmoil in medicine, and I am thankful indeed for the support the medical community has given PLICO, myself, and the PLICO board.

In 1996, PLICO experienced a spike in the payment of professional liability claims, $24,844,688. Fortunately, our company had set reserves at appropriate levels to cover those losses. For this reason, the loss experience last year did not affect the strength of our company or reduce PLICO's actuarial position. We are on track to achieve the target reserves set by the standards which insurance companies like ours are required to meet. Our philosophy has always been to operate as a not-for-profit insurer. Therefore, our reserves are set at the minimum level required by the insurance regulators. In January 1997 we felt that a ten percent rate increase was prudent to assure the achievement of the new regulatory requirement. Neither we nor our actuary concurs with the practical need for higher reserves the new regulations demand. This year we increased our total available resources for the payment of claims to over $200,000,000. This compares to available resources of $120,000,000 in 1992. In the future we will continue to seek only those premium increases and/or assessments which are necessary to ensure the financial viability of our company and to meet the financial requirements of regulators.

Our PLICO Committees have been busy this year and I would like to relate the highlights of their activities for you:

Nineteen ninety-six was a year that tested the endurance of your Underwriting Committee. The decision to allow osteopathic physicians to apply for professional liability insurance to PLICO produced a flood of applications. This, in turn, required a huge effort on the part of PLICO's Underwriting Committee. The members have met on numerous occasions to provide timely decisions for these new applicants. At the writing of this report, PLICO is insuring 72 osteopathic physicians. The same high level of underwriting standards are required of osteopathic applicants as of allopathic applicants. In the course of writing osteopathic physicians, PLICO found it needed to offer Nose Coverage. This is the same as Tail Coverage and is necessary for any physician making a change from a claims-made insurance policy to an occurrence insurance policy. All of the osteopathic physicians were insured on a claims-made insurance policy. In developing the premium for this extension of coverage, the Underwriting Committee noted that this coverage now needed to be available to certain allopathic physicians as well. Some MD physicians who had been forced by their employer to purchase claims-made insurance policies now require Nose Coverage in order to return to PLICO. Also, in 1996 the Underwriting Committee recommended that PLICO extend coverage to numerous ancillary health care providers employed by PLICO physicians. PLICO was paying losses on behalf of these health care providers under the "captain of the ship" doctrine, while other insurance companies were collecting premiums. This situation should no longer occur.

Last year your Claims Committee paid several large claims in a relatively short time. This unusual phenomenon which occurred in the middle of the year proved to be an aberration. The year ended quietly. The status of the significant claims which our company has been dealing with for some period of time, the principal one being the pedicle screw class action, has improved.

PLICO *(continued)*

The class action appears to be disintegrating. We believe that many of the claimants in the class action will not be able to successfully pursue individual claims. As you know, even in the worst case scenario, a policy limits loss on all claims will not have an adverse effect on PLICO because of reinsurance and conservative reserving. Although the dollars of claim payments were up in 1996, the number of open claims declined again. This is a significant and encouraging trend.

For many years, PLICO's Loss Prevention Committee spoke to our policyholders, and we policyholders carried on a dialogue with our committee. Our mutual interest focused us on finding ways to guarantee successful outcomes for our patients. In 1996, we discovered, not just our policyholders, but others, including the press, were listening to what we had to say. They did not understand our message. We are now wiser. If PLICO's efforts to help us protect our patients' welfare are to become a matter of public debate, we intend to be sensitive to this possibility in the future.

The PLICO Health product is a major contributor of premiums to our insurance company. The Health Division of PLICO is now in an extremely competitive marketplace. The willingness of HMOs to write insurance at the cost of claims, or less, has made the health insurance business a difficult place to be. PLICO Health offers features that no other insurer will consider offering: guaranteed insurability, non-cancelability, non-rateability. PLICO's policy is many times as valuable as those sold by the competitors especially when you need it most, when you are ill and when the illness promises to be a chronic one. We Oklahoma physicians need to understand that these features are as valuable as the occurrence feature in our professional liability insurance program. We need to protect our health insurance program just as we are protecting our professional liability policy. Because of the competitive pricing in the marketplace, we began the year with premiums that proved inadequate. We made a number of changes during 1996, changes that we hope will put PLICO Health back in the black in 1997. All of us need to support PLICO Health just as we are supporting our professional liability insurance program. Without our participation, features like guaranteed insurability will no longer be available to us and competitive pricing will vanish.

During the year, the Investment Committee took numerous actions to increase PLICO's return on investment. The Committee raised the benchmark for PLICO's two investment firms, Brown Brothers Harriman and 1838 Corporation. PLICO retained the services of a new firm, Walnut Asset Management of Philadelphia, to evaluate the performance of our money managers. PLICO, like all insurance companies, is closely regulated as regards the type of investments it can make. In addition, your Investment Committee and the PLICO Board have been conservative as regards investment policy. The Committee, as a whole, feels a heavy fiduciary responsibility as caretaker of your money and has been extremely reluctant to lower the quality of PLICO's portfolio. PLICO's money managers have concurred in this decision. The PLICO Board is determined to keep PLICO's assets real and secure.

In order for the OSMA to make a change in its auditors which it desired to do, PLICO agreed to change its auditor as well. The firm of Ernst & Young was selected to perform audits for both the OSMA and PLICO. The audit was completed on a timely basis and the Ernst & Young report was received by the PLICO Audit Committee at its March meeting. They rendered an unqualified opinion as to the fairness of PLICO's financial statements on a statutory basis. Their actuaries came within one percentage point of the mid-point for reserves indicated by our independent actuarial firm of Wakely & Associates which regularly performs PLICO's actuarial work.

Many of us remember when our insurance destiny was in the hands of others. In the 1970s, before PLICO, the cost of our professional liability insurance rose relentlessly. Some of us could not buy insurance at the high standard premiums and were forced to seek limited coverage through Lloyd's of London. In the '80s, we were told that physicians were too great a risk to insure for health insurance. The only way we can prevent a repetition of these situations is to maintain control of our destiny. We must keep PLICO strong and viable so that a limited, profit-oriented insurance market cannot gain a monopoly and hold us hostage in the future.

The end of 1996 completes PLICO's seventeenth year of operation. PLICO was founded by the Oklahoma State Medical Association in a time of crisis and change with a goal of providing a stable professional liability market for Oklahoma physicians. Subsequently, PLICO became the only source for health insurance for Oklahoma doctors. PLICO continues to provide high-quality insurance to the vast majority of physicians in Oklahoma. Our success has been achieved through the loyalty and commitment of us all, and the dedication of the PLICO Board of Directors you have elected.

Respectfully Submitted,
Floyd F. Miller, MD
Chairman
Physicians Liability Insurance Co.

[PLICO's corporate annual report was attached and copies are available from PLICO.]

REPORT OF THE SECRETARY-TREASURER

Reference Committee I (A-97)
Subject: Annual Report
Presented by: Carol Blackwell Imes, MD, Secretary-Treasurer
Referred to: Reference Committee I

Introduction

Financial information prepared for annual meeting presentation relating to the Oklahoma State Medical Association consists of the following:

Report of the Secretary-Treasurer
1996 Annual Audit by Ernst & Young
1997 Revised Annual Budget
1997 First Qtr. Financial Statement

Investments

During the past 4 years in which I have

served as Secretary-Treasurer, OSMA cash, cash equivalents and investments have increased from $1,013,044 at the end of December 1993 to $2,124,461 at the end of December 1996. This increase of $1,111,417 represents over a 109' growth' largely attributable to the return of a previous year contribution to capital from PLICO of $500,000 in 1996. Excluding the $500,000, however, cash, cash equivalents and investments have still shown a steady growth since December 1993 of $611,417 or 60%.

Reserves and accumulating interest are invested according to guidelines of the 1993 OSMA investment policy and are under management of the BANCOklahoma Trust Company in Oklahoma City. Funds are primarily held in U.S. Treasury notes, U.S. Treasury bills and Dreyfus government funds currently drawing an average interest rate of 5.3% with staggered maturity dates ranging from June 26, 1997 to February 28, 1999. This interest percentage rate is a notable increase over the interest rate of 2.7% being earned prior to moving the money to BANCOklahoma Trust Company in November 1993.

OSMA quarterly financial reports have reflected investments recorded at book value as the Association has had the ability and intent to hold the funds to maturity. The Association will be adapting its in-house method of recording investments at book value to recording at market value. This change will be made to comply with Financial Accounting Standards #124 which establishes standards for accounting for certain investments held by not-for-profit organizations.

At February 28, 1997, the $1,198,661 currently held in reserves at BANCOklahoma Trust Co. represents 65% of the desired one-year operational expenses that non-profit organizations strive to achieve. As Secretary-Treasurer of the Association, it has been and remains one of my goals to see that OSMA operates within the annual budget and at a surplus each year so that we can continue to build reserves

.

Major Expenditures

As illustrated in the Ernst and Young annual audit report, OSMA assets were significantly increased during the year of 1996. Comparing 1996 to 1995 figures, over $120,000 was added to assets through building improvements, the purchase of furniture, fixtures, equipment and computers as follows: building improvements $7,850; furniture, fixtures, equipment $67,415; and computers $44,844 (page 2, statement of financial position, asset section, property and equipment).

1996 Annual Audit

The 1996 OSMA annual audit was performed for the first time by Ernst & Young of Dallas.

The Big 6 firm was selected by the Association after review of proposals requested from seven major audit firms.

Throughout the month of January 1997 Ernst & Young personnel conducted an in-depth on-site audit of OSMA 1996 financial transactions. Association minutes, financial statements, financial reports and other related material for the 3 previous years were reviewed.

Transition from the previous auditing firm to Ernst & Young has been successfully completed. The OSMA Audit and Appropriations Committee and Secretary-Treasurer met March 25, 1997 at OSMA headquarters to review and approve the annual audit report. Copies of the Ernst & Young report are included in the financial section of the annual meeting information.

1997 Annual Budget

A copy of the 1997 revised annual budget is included with the annual meeting financial material. Proposed budget estimates, as approved at the October 13, 1996 meeting of the Board of Trustees, have been verified as accurately comparing with 1996 actual year-end revenue and expense figures. Estimated amounts are used in the revised budget after comparison with previous year's budget projections and previous year's actual figures. Anticipated expansion of activity is also considered in the revenue and expense estimates.

At the last quarterly meeting each year, the Board of Trustees is asked to approve the proposed budget for the following year. Board approval allows the Association to carry on financial transactions from January through annual meeting at which time the House of Delegates is asked to officially approve the annual revised budget.

OSMA Budget Comparison

Comparing the 1997 revised annual budget to the 1996 final budget, a 2.6% increase in revenue and a 1.3% increase in expenses is projected for 1997.

	1993	1994	1995	1996	1997
Revenue	1,801,853	1,803,000	1,851,000	1,856,500	1,904,200
Expenses	1,733,583	1,701,750	1,770,000	1,825,345	1,848,700
Revenue over Expenses	68,270	101,250	81,000	31,155	55,500

Again in 1997, as in 1996, there have been many unknowns to consider in revising the 1997 annual budget. Changes have been made to allow for departing personnel as well as for a new CEO and staff. An OSMA dues increase is *not* projected in the 1997 revised budget.

A contingency of $23,500 is included in the 1997 revised budget for emergency or unexpected expenses.

A detailed breakdown of council expenses of $5,000 or more is included in the budget as previously requested.

1997 budgets for the Education & Research Foundation and Member Service For-Profit Corporation are included on pages 6, 7 and 8 following the OSMA budget in the budget section of the financial material.

OSMA Dues

$1,130,000 total membership dues revenue is projected in the 1997 revised annual budget. For accounting purposes the total dues revenue is evenly allocated throughout the year as follows: OSMA dues $1,040,000, *Journal* $60,000, and annual meeting $30,000.

Annual membership dues revenue has increased an aver-

age of $40,636 a year during my two 2-year terms of office without an increase in dues. Annual audit reports recorded OSMA dues revenue as follows:

Actual 1992	Actual 1993	Actual 1994	Actual 1995	Actual 1996	Budget* 1997
926,822	1,007,192	1,031,540	1,057,175	1,088,808	1,130,000

*Projected

Non-Dues Revenue

OSMA non-dues revenue has increased 15% in 1996 over 1995. A further increase is anticipated in 1997 over the 1996 amount. This non-dues revenue was generated from interest on investments, building lease, directory sales and advertising, computer label sales, member services, annual meeting exhibit and ticket sales and *Journal* advertising and sales.

Ongoing action of controlling expenses and expanding non-dues revenue will, in time, allow the Association to reduce, instead of increase, the amount of royalty payments OSMA has been receiving from PLICO over a number of years.

OSMA Education and Research Foundation

The Foundation was created in 1994 with a very broad purpose and could be used for a wide range of activities. Designated as a 501(c)(3), the Foundation could solicit funds from the general public as well as OSMA membership.

The primary source of revenue for the Foundation since 1994 has been from annual contributions of $125,000 from PLICO for the operation of a physician recovery program. Other annual contributions of $12,000 each have been received from the Osteopathic and Dental Associations to be used toward expenses of the program. Primarily, expenses have been for the salaries of the director and two assistant directors. One physician recovery program loan has been made each year since 1994, ranging from $2,500 to $3,000.

The Council on Medical Education has also been operated through the Foundation. A 1997 Council on Continuing Medical Education revised budget is set out separately on page 7 of the budget section of financial material. The total revenue and expenses of the Council are included in the Foundation budget.

During the year of 1996 the Foundation received revenue of $164,053 and incurred expenses of $152,720, ending the year with $11,333 revenue over expenses.

Financial transactions of the Foundation are not included as a part of the formal OSMA financial statements. A separate breakdown of Foundation revenue and expenses for the 1997 first quarter is included on page 7.

A 1997 revised budget for the Education & Research Foundation is shown on page 6 and 7 of the budget section of financial material.

OSMA Member Service For-Profit Corporation

A revenue over expense figure of $8,738 at December 31, 1996 indicated the For-Profit Corporation received revenue of $24,327 during 1996, incurred expenses of $3,089 and transferred 1995 after-tax profit of $12,500 to OSMA.

1996 revenue was received from various sources such as Stillwater National Bank, Utica Physicians Association, C.L. Frates, I.C. Systems, Tax Resources, Auto Flex, Conomikes and Destinations. Expenses showed payments to Grant Thornton for filing 1995 tax returns, Boatmen's Bank for tax deposits and to the Oklahoma Tax Commission for tax payments.

At the time of the writing of this report the after-tax profit contribution for 1996 had not been calculated but after filing of the 1996 tax returns an annual contribution amount will be known and transferred to the Association.

A separate brief first quarter financial statement for the OSMA Member Service For-Profit Corporation is shown on page 8 following the OSMA first quarter financial statement. During the months of January and February of 1997, the For-Profit Corporation recorded revenue of $5,766 and no expense.

The "Investment in OSMA Member Service For-Profit Corporation" contribution amount is reflected on the OSMA statement of financial position. The "Member Service For-Profit" revenue is reflected on the OSMA statement of activities.

A 1997 revised budget for the For-Profit Corporation is shown on page 8 accompanying the OSMA annual revised budget material. For-Profit activity similar to 1996 is projected for 1997.

Oklahoma Centralized Verification Organization

An annual payment of $50,000 to the OCVO was made by the Association in 1996. The initial expense was approved at the October 13, 1996 meeting of the OSMA Board of Trustees. Subsequent payments are to be agreed upon by OSMA and OCVO.

Defined Benefit Pension Plan

Distribution of assets from the "old" defined benefit pension plan to plan participants is expected to occur mid-year 1997. The Association has not been notified of the exact amount of under funding but has designated an amount in the 1997 revised budget for payment of this past obligation.

Plan benefits were frozen as of December 31, 1992 by action of the OSMA Board of Trustees. The Board elected to pay the under funded amount, at that time, of approximately $226,000 into the plan within 3-5 years. Required contributions according to annual plan evaluations have continued to be paid by the Association for plan years since the defined benefit plan was frozen.

Since early in 1996 compliance with requirements for plan termination has been underway. OSMA received a favorable determination letter from the IRS on March 24, 1997. Upon notification, the Association expects to immediately fund all obligations of the defined benefit pension plan allowing settlement of prior years liabilities.

Profit Sharing Plan

At the end of 1996 eight OSMA employees were covered by the plan. Contributions of 10% of gross salary for each eligible employee are made monthly by the Association. All sal-

aried full-time employees are eligible to be included in the plan after a waiting period figured on date of employment and plan year.

Certified Public Accountant
Carl L. Hamilton, CPA of Hamilton & Associates, Inc. was contracted by OSMA to act as a consultant during the last half of 1996.

Hamilton has prepared and filed annual tax returns for the OSMA, the Education & Research Foundation and the Member Service For-Profit Corporation.

1997 First Quarter
The first quarter financial information covers transactions occurring in the months of January and February only. March data could not be included because of the March cutoff date for preparation and mailing of annual meeting material.

At February 28, 1997 the OSMA statement of activities reflected year-to-date revenue over expenses of $85,402, resulting from $348,980 having been received as revenue and expenses of $263,578 incurred. This revenue over expense figure indicated that $31,628 more in revenue had been received than budgeted and $44,492 less had been expended than budgeted.

The Association has been operating since January 1, 1997 and will operate through annual meeting on the proposed budget approved by the Board of Trustees at its October 13, 1996 meeting. Estimates were compared to the annual audit report for accuracy.

Summary
The OSMA has increased its investments and assets significantly during 1996.

The OSMA has increased its non-dues revenue by 15% during 1996. Revenue from dues has also increased steadily due to an increased number of members.

The OSMA is expected to terminate the old defined benefit pension plan this year and has budgeted the amount expected to be required.

The OSMA 1997 budget attempts to accurately reflect the expenditures expected in 1997. The Board of Trustees has been kept informed of the expenses of the Association and the budgeting process.

The OSMA has the financial resources and capabilities to maintain and/or increase its current level of projects.

Recommendations
(1) Approval of the 1996 OSMA Annual Audit by Ernst & Young
(2) Approval of the 1997 OSMA Annual Revised Budget
(3) Approval of the 1997 OSMA First Quarter Financial Statement

Respectfully submitted,
Carol Blackwell Imes, MD
Secretary-Treasurer

FINANCIAL STATEMENTS AND SUPPLEMENTAL SCHEDULES

Years ended December 31, 1996 and 1995 with Report of Independent Auditors

Report of Independent Auditors

Board of Trustees
Oklahoma State Medical Association

We have audited the accompanying statement of financial position of the Oklahoma State Medical Association (an Oklahoma corporation), as of December 31, 1996, and the related statements of activities and cash flows for the year then ended. These financial statements are the responsibility of the Association's management. Our responsibility is to express an opinion on these financial statements based on our audit. The financial statements of Oklahoma State Medical Association for the year ended December 31, 1995, were audited by other auditors whose report dated February 20, 1996, expressed an unqualified opinion on those statements and included explanatory paragraphs for a change in accounting method and adoption of new accounting principles.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the 1996 financial statements referred to above present fairly, in all material respects, the financial position of Oklahoma State Medical Association, as of December 31, 1996, and the results of its operations and its cash flows for the year then ended in conformity with generally accepted accounting principles.

Ernst & Young, LLP
February 27, 1997

See accompanying notes.

Oklahoma State Medical Association
STATEMENTS OF FINANCIAL POSITION

	December 31 1996	1995
Assets		
Cash and cash equivalents	$ 1,302,231	$ 834,102
Accounts Receivable, primarily membership dues	1,006,916	957,231
Inventory	18,013	17,885
Prepaid expenses	11,933	9,068
Investments	822,230	548,289
Property and equipment, at cost:		
Land	7,808	7,808
Building and improvements	486,857	479,007
Furniture, fixtures, and equipment	456,560	344,301
	951,225	831,116
Less accumulated depreciation and amortization	(323,220)	(256,515)
	628,005	574,601
Other investments:		
Investment in PLICO	15,302,775	15,302,775
Investment in OCVO	50,000	—

Financial Statements *(continued)*

Equity in unconsolidated subsidiary—MSC	23,648	13,463
	15,376,423	15,316,238
Total assets	$19,165,751	$18,257,414
Liabilities and Net Assets		
Accounts payable	$ 303,607	$ 326,571
Accrued pension costs	210,388	215,016
Deferred membership dues	1,131,848	1,105,632
Total liabilities	1,645,843	1,647,219
Net assets:		
Unrestricted	1,977,858	1,076,013
Temporarily restricted	239,275	231,407
Permanently restricted—Investment in PLICO	15,302,775	15,302,775
Total net assets	17,519,908	16,610,195
Total liabilities and net assets	$19,165,751	$18,257,414

See accompanying notes.

Oklahoma State Medical Association
STATEMENTS OF ACTIVITIES

	Year ended December 31 1996	1995
Unrestricted Net Assets		
Support and revenues:		
Membership dues	$ 998,808	$ 967,175
Investment income	626,362	140,921
Advertising and sales—directory	73,724	40,003
Annual meeting	73,906	60,640
Contracts with PLICO	437,500	420,000
Journal	115,097	127,671
Equity in earnings of unconsolidated subsidiary—MSC	10,185	10,809
Other revenues and support	211,514	140,166
Total support and revenues	2,547,096	1,907,385
Net assets released from restrictions	—	1,500
	2,547,096	1,908,885
Expenses:		
Program services:		
Member services	426,366	521,199
Educational programs	61,655	66,134
Publications	144,270	188,212
Supporting services—general and administrative	1,012,960	1,165,747
Total expenses	1,645,251	1,941,292
Increase (decrease) in unrestricted net assets	901,845	(32,407)
Temporarily Restricted Net Assets		
Investment income	7,868	7,825
Contributions	—	979
Restrictions satisfied by payments	—	(1,500)
Increase in temporarily restricted net assets	7,868	7,304
Permanently Restricted Net Assets		
PLICO assessment	—	3,149,403
Increase in total net assets	909,713	3,124,300
Net assets at beginning of year, as previously reported	16,610,195	8,528,639
Adjustment for change in the method of accounting for investment in PLICO	—	4,733,153
Retroactive application of change in accounting principles for new pronouncement	—	224,103
Net assets at beginning of year, as restated	16,610,195	13,485,895
Net assets at end of year	$17,519,908	$16,610,195

See accompanying notes.

Oklahoma State Medical Association
STATEMENTS OF CASH FLOWS

	Year ended December 31 1996	1995
Operating Activities		
Increase in net assets	$ 909,713	$ 3,124,300
Adjustments to reconcile increase in net assets to net cash provided by operating activities:		
Depreciation and amortization	65,958	52,034
Equity in earnings of unconsolidated subsidiary—MSC	(10,185)	(10,809)
Gain on sale of property and equipment	—	(507)
Assessments permanently restricted	—	(3,149,403)
Changes in operating assets and liabilities:		
Accounts receivable	(49,685)	(57,466)
Inventory	(128)	(5,312)
Prepaid expenses	(2,865)	6,900
Accounts payable	(22,964)	(232)
Accrued pension costs	(4,628)	199,592
Deferred membership dues	26,216	37,032
Net cash provided by operating activities	911,432	196,129
Investing Activities		
Proceeds from sale of property and equipment	—	934
Purchase of investments	(473,194)	—
Proceeds from sale or maturity of investments	200,000	71,553
Purchases of property and equipment	(120,109)	(121,421)
Payments received on amounts due from PROklahoma Care, Inc.	—	290,622
Investment in PLICO	—	(3,149,403)
Investment in OCVO	(50,000)	—
Dividend received from unconsolidated subsidiary—MSC	—	13,000
Net cash used in investing activities	(443,303)	(2,894,715)
Financing Activities		
Proceeds from assessments for capitalization of PLICO	—	3,149,403
Payments on note payable to bank	—	(150,000)
Net cash provided by financing activities	—	2,999,403

Net increase in cash and cash equivalents	468,129	300,817
Cash and cash equivalents at beginning of year	834,102	533,285
Cash and cash equivalents at end of year	$1,302,231	$ 834,102

See accompanying notes.

Oklahoma State Medical Association
NOTES TO FINANCIAL STATEMENTS

December 31, 1996

1. Basis of Presentation and Summary of Significant Accounting Policies

Basis of Presentation
The Oklahoma State Medical Association (the Association) was formed as a not-for-profit organization that provides educational and various other services to the members of the medical profession in the state of Oklahoma. Its wholly owned subsidiary, Member Services Corporation (MSC), provides other miscellaneous services to members of the Association.

The Association also owns 100% of the outstanding common stock of Physicians Liability Insurance Company (PLICO), which provides professional medical liability insurance and certain health and accident insurance to physicians who are members of the Association and to other qualified Oklahoma physicians. See Note 3.

The OSMA Education & Research Foundation (the Foundation) is a related not-for-profit organization that primarily provides referral services and financial assistance for members suffering from substance abuse disorders. The Foundation also provides for certain medical scholarship loans and grants. The Association's Board of Trustees are the sole voting members of the Foundation. The Association provides certain administrative services for the Foundation. Such services are not considered material to the Association. The Oklahoma Centralized Verification Organization (OCVO) was established to provide efficient and effective credentialing of physicians and allied health professionals statewide to hospitals, group practices, insurers, managed care organizations, and others. The Association has a 30% interest in the OCVO.

Revenue Recognition
Membership dues are recognized ratably over the membership period.

Cash and Cash Equivalents
All highly liquid debt instruments with a maturity at purchase of three months or less and money market funds are considered to be cash equivalents.

The Association maintains its cash and cash equivalents in accounts which may not be federally insured. The Association has not experienced any losses in such accounts and believes it is not exposed to any significant credit risk on cash and cash equivalents.

Income Taxes
The Association was organized as a not-for-profit organization and, as such, is exempt from income taxes under Section 501(c)(6) of the Internal Revenue Code of 1986, as amended. The Association does, however, pay income taxes on unrelated business income, if any.

Property and Equipment
Depreciation is computed using the straight-line method over the estimated useful lives of the assets.

Investments
Investments in fixed income securities are recorded at amortized cost which approximates market. See Note 2.

Generally, unconsolidated subsidiaries in which the Association has a controlling interest are accounted for by the equity method and unconsolidated subsidiaries in which the Association does not have a controlling interest are accounted for by the cost method. In 1995, the Association changed its method of accounting for its investment in PLICO to the cost method because neither the Association nor its Board of Trustees has a controlling interest in PLICO or is able to exercise significant influence over operating and financial policies of PLICO. Prior to January 1, 1995, the Association accounted for its investment in PLICO using the equity method. Net assets at the beginning of 1995 have been adjusted for this change.

The Association accounts for its investment in MSC using the equity method. The assets, liabilities, and results of operations of MSC are not considered material to the Association and therefore are not consolidated.

Use of Estimates
The preparation of financial statements in conformity with generally accepted accounting principles requires the Association to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

2. Investments
Statement of Financial Accounting Standards No. 124, Accounting for Certain Investments Held by Not-for-Profit Organizations, which became effective January 1, 1996, requires that all investments in debt securities be reported at fair value with gains and losses included in the statement of activity. The Association carries its investments in debt securities at cost or amortized cost in its statements of financial position because such amounts are not materially different from fair value. The cost or amortized cost and estimated market value of investments in fixed income securities at December 31, 1996 and 1995, are as follows:

	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Market Value
December 31, 1996				
U.S. Treasury securities	**$822,230**	**$14,702**	**$2,452**	**$834,480**
December 31, 1995				
U.S. Treasury securities	$548,289	$ 2,031	$1,234	$549,086

The cost or amortized cost and estimated market value of investments in fixed income securities, by contractual maturity, at December 31, 1996, are as follows:

	Cost or Amortized Cost	Estimated Market Value
1997	**$599,058**	**$612,245**
1998 through 2002	**223,172**	**222,235**
	$822,230	**$834,480**

3. Investment in PLICO
PLICO was formed to provide professional medical liability insurance and certain health and accident insurance to physicians who are members of the Association and to other qualified Oklahoma physicians. The business affairs of PLICO are managed by a Board of Directors that is not controlled by the Association or its Board of Trustees. The primary source of capital for PLICO has been through periodic assessments of members by the Association. Statement of Financial Accounting Standards No. 117, Financial Statements of Not-for-Profit Organizations, requires not-for-profit organizations to report the amounts for each of three classes of net assets—permanently restricted net assets, temporarily restricted net assets, and unrestricted net assets—based on the existence or absence of donor-imposed restrictions. Although the assessments were involuntary and therefore cannot contain donor-imposed restrictions, the Association has accounted for the assessments as permanently restricted because such assessments were intended to provide PLICO with permanent capital.

Financial Statements *(continued)*

In 1992, the Association approved an assessment on its member physicians for the purpose of obtaining funds to be contributed to PLICO as additional contributed capital. The assessment was for three years, began in 1993, and was based on a percentage of the members' basic professional liability policy premiums. This assessment provided PLICO with additional contributed capital of approximately $3,149,000 during 1995; 1995 was the final year of this assessment.

PLICO is domiciled in Oklahoma and is subject to regulatory oversight by the Insurance Department of Oklahoma (the Department). The statutory-basis financial statements for PLICO as of December 31, 1996 and 1995, and for the years then ended have been prepared in conformity with the accounting practices prescribed or permitted by the Department (statutory accounting practices), which is a comprehensive basis of accounting other than generally accepted accounting principles (GAAP). The principal differences from GAAP are as follows:

Investments: Investments in bonds are reported at amortized cost or market value based on their National Association of Insurance Commissioners (NAIC) rating; for GAP, such fixed maturity investments would be designated at purchase as held-to-maturity, trading, or available-for-sale. Held-to-maturity fixed investments would be reported at amortized cost, and the remaining fixed maturity investments would be reported at fair value with unrealized holding gains and losses reported in operations for those designated as trading and as a separate component of shareholder's equity for those designated as available-for-sale.

Policy Acquisition Costs: The costs of acquiring and renewing business are expended when incurred. Under GAAP, such costs, to the extent recoverable, would be deferred and amortized over the effective period of the related insurance policies.

Nonadmitted Assets: Certain assets designated as "nonadmitted," principally past-due agents' balances and furniture and equipment, are excluded from the accompanying balance sheets and are charged directly to unassigned surplus.

Reinsurance: Reserves for losses and loss adjustment expenses and unearned premiums ceded to reinsurers have been reported as reductions of the related reserves rather than as assets as would be required under GAAP.

Federal Income Taxes: Deferred federal income taxes are not provided for differences between the financial statement amounts and tax bases of assets and liabilities.

The effects of the foregoing variances from GAAP on the accompanying statutory-basis financial information have not been determined but are presumed to be material. PLICO's statutory-basis financial information is prepared in accordance with accounting practices prescribed or permitted by the Department. "Prescribed" statutory accounting practices include state laws, regulations, and general administrative rules, as well as a variety of publications of the National Association of Insurance Commissioners (NAIC). "Permitted" statutory accounting practices encompass all accounting practices that are not prescribed; such practices may differ from state to state, may differ from company to company within a state, and may change in the future. The NAIC currently is in the process of recodifying statutory accounting practices, the result of which is expected to constitute the only source of "prescribed" statutory accounting practices. Accordingly, that project, which is expected to be completed in 1997, will likely change, to some extent, prescribed statutory accounting practices, and may result in changes to the accounting practices that PLICO uses to prepare its statutory-basis financial statements. The impact of any such changes on PLICO's statutory surplus cannot be determined at this time and could be material.

In 1995 and 1996, PLICO received written approval from the Department to operate at a prescribed minimum level of discounted loss and loss adjustment expense reserves. PLICO has entered into an agreement with the Department whereby PLICO will increase discounted net professional medical liability reserves plus surplus as regards policyholders in excess of the $4,000,000 statutory minimum to approximately 50% of its consulting actuaries' range of discounted reserves by December 31, 1997. The agreement includes incremental minimum levels to be achieved annually throughout the term of the agreement. PLICO is in compliance with the terms of the agreement at December 31, 1996. Management of PLICO currently intends to continue operating at that level which management believes is consistent with its not-for-profit objectives and that of the Association.

The following is summarized statutory-basis financial information for PLICO as of and for the years ended December 31, 1996 and 1995:

	1996	1995
	(In Thousands)	
Cash and invested assets	**$104,250**	$105,681
Other assets	**1,484**	1,813
Total admitted assets	**$105,734**	$107,494
Liability for losses and loss adjustment expenses	**$ 83,736**	$ 84,849
Advance premiums	**7,081**	7,786
Other liabilities	**18**	93
Total liabilities	**90,835**	92,728
Surplus as regards policyholders	**14,899**	14,766
Total liabilities and surplus as regards policyholders	**$105,734**	$107,494
Premiums earned		**$ 46,612**
$ 48,752		
Losses and loss adjustment expenses incurred	**(43,423)**	(45,608)
Other underwriting expenses	**(9,363)**	(9,298)
Net investment income	**6,807**	6,692
Net income	**$ 633**	$ 538

PLICO uses independent consulting actuaries to review its evaluation of the required level of reserves for losses and loss adjustment expenses. The consulting actuaries determined a low reasonable estimate and a high reasonable estimate for PLICO's professional medical net liability loss and loss adjustment expenses. These estimated discounted net reserves ranged from $70,997,000 to $117,524,000 at December 31, 1996. PLICO's discounted net reserves for professional medical liability losses and loss adjustment expenses plus surplus as regards policyholders in excess of the $4,000,000 statutory minimum was approximately $90,785,000 at December 31, 1996, and was within the consulting actuaries' recommended range.

The reserves for unpaid losses and loss adjustment expenses are estimated using case-basis valuations and statistical analyses and represent the estimated ultimate net cost of all reported and unreported losses incurred during the year. Among the factors considered in determining the liability are cumulative payments made on losses and loss adjustment expenses by accident year, management's case-basis estimates of the remaining liability for losses and loss adjustment expenses on reported claims, and an estimate for claims incurred but not reported (IBNR) and development of case-basis estimates. These estimates are subject to the effects of trends in loss severity and frequency. Although considerable variability is inherent in such estimates, the management of PLICO believes that the reserves for losses and loss adjustment expenses are adequate. The estimates are continually reviewed and adjusted as necessary as experience develops or new information becomes known; such adjustments are included in PLICO's current operations.

The most reasonable estimate of a liability for unpaid losses and loss adjustment expenses is made when: 1) the period of time between the loss occurrence and ultimate settlement is short; 2) the absolute number of policies is high, resulting in more meaningful average cost amounts; and 3) a large base of historical data exists. Because of the length of time required for the development of the ultimate liability and PLICO's small policy base, there is a significant degree of uncertainty in PLICO's reserve estimates. Accordingly, the ultimate settlement of losses and loss adjustment expenses may vary significantly from the estimated amounts included in PLICO's statutory-basis financial statements.

At periodic intervals, the Department routinely examines PLICO's stat-

utory-basis financial statements as part of their legally prescribed oversight of the insurance industry. On the basis of these examinations, the Department can direct that PLICO's statutory-basis financial statements be adjusted in accordance with their findings. The Department has completed a triennial examination of PLICO's statutory-basis financial statements for the period ended December 31, 1995. The results of this examination are unpublished, but the Department has informed PLICO there will be no material adjustments to the statutory-basis financial statements.

PLICO paid the Association $437,500 and $420,000 in 1996 and 1995, respectively, for services to control liability losses through research and promotion of good medical practices. These amounts have been included as revenues by the Association. Investment income includes a $500,000 distribution the Association received from PLICO in 1996.

4. Employee Benefit Plans

On October 29, 1995, the Association's Board of Trustees approved termination of the Association's defined benefit pension plan. The termination process began in the first quarter of 1996 with notices of intent to terminate being distributed to participants and should be completed on or about May 31, 1997, with settlement of all benefit liabilities. As a result of this termination and thus the elimination of future service periods, the Association accrued pension costs of approximately $215,000 during 1995. This accrual is the additional amount necessary to fully fund all benefit liabilities at settlement and is based on certain actuarial estimates and assumptions which may change prior to actual settlement. The Association paid approximately $5,500 of this accrual to the plan in 1996 and currently intends to pay the remainder in 1997.

Separately, the Association sponsors a defined contribution plan that covers substantially all full-time employees. Contributions to the plan are at the discretion of the Association. Expense relating to this plan was approximately $61,000 and $62,000 in 1996 and 1995, respectively.

5. Change in Accounting Principles for New Pronouncements

The Association adopted Statement of Financial Accounting Standards No. 116, Accounting for Contributions Received and Contributions Made (Statement 116), in 1995. In accordance with Statement 116, contributions received are recorded as unrestricted, temporarily restricted, or permanently restricted support, depending on the existence or nature of any donor restrictions. As permitted by Statement 116, the Association has retroactively applied the provisions of this new statement by restating net assets as of January 1, 1995. The adjustment of $224,103 made to net assets as of January 1, 1995, represents time and purpose-restricted contributions previously reported as deferred revenue. Under Statement 116, such contributions are required to be reported as temporarily restricted support and are then reclassified to unrestricted net assets upon expiration of the time restriction or compliance with the purpose restriction. The effect of this new statement on the Association's change in net assets for 1995 was not material.

In 1995, the Association also adopted Statement of Financial Accounting Standards No. 117, Financial Statements of Not-for-Profit Organizations (Statement 117). Under Statement 117, the Association is required to report information regarding its financial position and activities according to three classes of net assets: unrestricted net assets, temporarily restricted net assets, and permanently restricted net assets. As permitted by this new statement, the Association has discontinued its use of fund accounting and has, accordingly, reclassified its financial statements to present the three classes of net assets required. This reclassification had no effect on the change in net assets for 1995.

SUPPLEMENTAL INFORMATION

Report of Independent Auditors on Supplemental Information

Board of Trustees
Oklahoma State Medical Association

Our audit was conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The schedule of revenue and expenses and schedule of general and administrative expenses by type are presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information, except for that portion marked "unaudited," on which we express no opinion, has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

Ernst & Young, LLP
February 27, 1997

Oklahoma State Medical Association
SCHEDULE OF REVENUES AND EXPENSES

Year ended December 31, 1996

	Budget	Actual
	(Unaudited)	
Support and revenues by budget category:		
Membership dues	$ 967,000	$ 998,808
Commissions and interest	120,000	180,877
Advertising and sales—directory	50,000	73,724
Contracts with PLICO	437,500	437,500
Lease income	15,000	19,578
Journal	125,000	115,097
Annual meeting	60,000	73,906
Other	82,000	647,606
Total support and revenues	1,856,500	2,547,096
Expenses by budget category:		
Member services:		
Annual meeting	60,000	54,280
Councils and committees	273,650	215,833
Other	—	156,253
	333,650	426,366
Educational programs	72,600	61,655
Publications	140,000	144,270
General and administrative	1,279,095	1,012,960
Total expenses	1,825,345	1,645,251
Increase in unrestricted net assets	$ 31,155	$ 901,845

Oklahoma State Medical Association
SCHEDULE OF GENERAL AND ADMINISTRATIVE EXPENSES BY TYPE

Year ended December 31, 1996

	Budget	Actual
	(Unaudited)	
Salaries	$ 450,000	$ 415,511
Payroll taxes	40,000	32,296
Pension plan contribution	68,000	66,603
Pension plan trustee fee and other	—	228
Health insurance	63,960	57,833
Staff and officers	85,000	76,434
Disability income insurance	3,500	2,980
Auto rental and maintenance	27,950	3,175
In-state travel	500	272
Office supplies	40,000	52,112
Copier purchase	25,000	—
Equipment repairs and service	5,000	2,169
Postage	50,000	—
Telephone	30,000	—
General insurance	35,000	29,723
Utilities	20,000	19,832

(table continues on next page)

Financial Statements *(continued)*

(table continued from previous page)

Services	4,000	—
Building maintenance, remodeling, and yard maintenance	49,500	76,824
Accounting and legal	56,000	53,736
Computer and computer upgrade	69,835	41,380
Dues and subscriptions	11,350	12,459
Awards and contributions	3,500	—
County Society dues commissions	12,000	—
AMA convention	80,000	—
Depreciation	45,000	66,718
Other	4,000	2,675
	$1,279,095	$1,012,960

Oklahoma State Medical ASsociation
1997 REVISED BUDGET

	1996 Final Budget	1997 Revised Budget
Support and Revenue		
Membership		
OSMA Dues	$ 967,000	$1,040,000
Interest—Other	55,000	110,000
Interest—PLICO	20,0000	
AMA Commissions	45,000	47,000
Building Lease	15,000	37,200
Directory Sales & Advertising	50,000	70,000
Computer Labels	8,000	8,000
Member Service For-Profit	12,000	20,000
Member Service Council	45,000	35,000
Contract with Subsidiary—PLICO	437,500	337,500
Other	17,000	25,000
Total Membership Support & Rev.	1,671,500	1,729,700
Journal		
Subscription	1,000	2,000
Dues Allocation	60,000	60,000
Advertising	64,000	50,000
Total Journal Support & Revenue	125,000	112,000
Annual Meeting		
Exhibit Fees	16,500	20,000
Dues Allocation	30,000	30,000
Ticket Sales	13,500	12,500
Total Annual Meet. Support & Rev.	60,000	62,500
Total Support and Revenue	$1,856,500	$1,904,200
Program Services and Support Expenses		
Councils & Committees	$ 241,500	$ 235,000
Journal	140,000	104,000
Annual Meeting	60,000	60,000
General & Administrative	1,279,095	1,426,200
PLICO	80,600	0
Contingency	24,150	23,500
Total Program Services & Support	$1,825,345	$1,848,700
Excess of Revenue over Expenses	$ 31,155	$ 55,500

	1996 Final Budget	1997 Revised Budget
Program Services		
Journal Expenses		
Salaries	$ 36,000	$ 0
Printing	86,500	86,500
Art Work	7,500	7,500
Proofreading	1,000	1,000
Operating	9,000	9 000
Total Journal Program Services	140,000	104,000
Annual Meeting Expenses		
Travel	400	500
Exhibit	1,500	1,500
Photo	750	1,000
Planning	100	100
Printing	9,000	7,000
Supplies	5,500	6,400
Speakers	1,500	1,500
Entertainment	5,000	5,000
Signs & Security	1,000	1,000
Audio Visual	750	750
Awards & Trophies	1,000	2,250
Hotel & Convention	32,000	32,000
Flowers	1,500	1,000
Total Annual Meeting Prog.Serv.	60,000	60,000
Council & Committee Expenses		
Prof. & Public Relations	35,000	53,000
Planning & Development	2,500	5,000
Medical Services	1,000	1,000
Member Services	45,500	20,000
Public & Mental Health	2,000	1,000
State Legislation	92,500	92,500
Governmental Activities	35,000	35,000
Organized Medical Staff	1,000	1,000
Alliance Activities	10,000	10,000
Student Section	8,000	10,000
Resident Section	1,500	2,000
Rural Health	3,000	1,000
Young Physician Section	2,500	2,500
International Med. Graduates	2,000	1,000
Total Council & Comm.Prog.Serv.	241,500	235,000
Contingency	$ 24,150	$ 23,500
Supporting Services		
Membership		
Salaries	$ 450,000	$ 475,000
Payroll Tax	40,000	45,000
Profit Sharing Plan	60,000	35,000
Pension Plan—Termination	8,000	160,000
Health Insurance	63,960	47,000
Staff & Officers	85,000	75,000
CEO Search	0	15,000
Disability Insurance	3,500	3,200
Auto Allowance	27,950	0
In-state Travel	500	1,000
Office Supplies	40,000	50,000
Equipment Repair & Service	5,000	3,000
Postage	50,000	50,000
Telephone	30,000	30,000
General Insurance	35,000	35,000
Utilities	20,000	22,000
Services	4,000	6,000
Building Maint. & Repair	28,500	21,000
Building Remodel	15,000	0
Yard Maintenance	6,000	7,000
Accounting & Audit	6,000	13,500

Legal	50,000	62,000
Computer	25,000	35,000
Internet	0	15,000
Computer Upgrade	44,835	24,000
Copier Purchase	25,000	0
Dues & Subscriptions	11,350	12,000
Awards & Contributions	3,500	3,500
County Dues Commissions	12,000	27,000
AMA Convention	80,000	85,000
Depreciation	45,000	55,000
Trustee Fee—Reserves	4,000	4,000
Other	0	10,000
Total Membership Supporting Services	$1,279,095	$1,426,200

1997 ITEMIZED COUNCIL & COMMITTEE BUDGETS EXCEEDING $5,000

Professional & Public Relations	
Printing—OSMA News, Year in Review, etc.	$18,000
Mailing service	5,500
Brochures, Pamphlets, Newspapers, etc.	2,400
OSMA Directory	18,500
Special Projects	5,000
Clipping Service	600
Photos	250
Catering	300
Travel	1,000
Donations & Miscellaneous	1,450
Total Professional & Public Relations	$53,000
Member Services	
Seminar Speakers	$ 6,000
Seminar Printing & Mailing Service	5,000
Seminar Meeting Rooms & Refreshments	8,000
Miscellaneous1	1,000
Total Member Services	$20,000
State Legislation & Regulation	
Legislative Reporter Subscription	$ 1,690
Medicine Day or Dr. of the Day Contact Program	5,000
Telephone Charges & Pagers	1,160
Legislator Requested Sponsorship	3,000
Legislative Conferences/Dr. Brandt & Lobbyists	4,500
Legislative Tracking Service	4,150
OMPAC Mailings & Printing	6,500
Box at Capitol	500
Catering for Council	2,500
Professional Dues & Publications	500
Dr. of the Day at Capitol Drugs	1,500
Legislative Dinners & Contact Lunches & Dinners	2,500
Printing of Bills, Mailings, Newsletters	9,000
Copying of Bills & Faxing Legislative Alerts	4,000
Contract Lobbyist	46,000
Total State Legislation & Regulation	$92,500
Council on Governmental Activities	
Contract Lobbyist	$25,000
Contract Lobbyist Miscellaneous Expenses	2,500
Trips to Washington, DC, for 3	7,500
Total of Council on Governmental Activities	$35,000
OSMA Alliance	
Direct Transfer to Alliance	$ 5,000
Mailings, Supplies, Staff AMA Trip, etc.	5,000
Total OSMA Alliance	$10,000
OSMA Medical Student Section	
Annual Picnic	$ 4,000
AMA Convention	5,000
Meals, Miscellaneous	1,000
Total OSMA Medical Student Section	$10,000

OSMA EDUCATION AND RESEARCH FOUNDATION 1997 REVISED BUDGET

Foundation Revenue	
Bank Interest	$ 3,000
Foundation Expenses	
Bank Charges	60
Annual Tax Return	1,000
Audit	1,000
Total Foundation Expenses	2,060
Foundation Excess Revenue over Expenses	$ 940
Physician Recovery Program Revenue	
PLICO	$125,000
Oklahoma Osteopathic Association	12,000
Oklahoma Dental Association	12,000
Contributions/Other	750
Total Physician Recovery Program Revenue	149,750
Physician Recovery Program Expenses	
Director	109,000
Assistant Directors (2)	24,000
Loans	6,000
Program Catering	250
Other	1,000
Total Physician Recovery Program Expenses	140,250
PRP Excess Revenue over Expenses	$ 9,500
Council on Medical Education	
CME Excess Revenue over Expenses*	$ 4,100
Total OSMA ERF Revenue over Expenses	$ 14,540

*See Page 7 for CME budget breakdown

COUNCIL ON MEDICAL EDUCATION 1997

Revenue:	
Hospital Revenues	$1000.00
Contributions from dues	100.00
Grant from AMA	4500.00
Physicians Accessing the Internet	
Annual Meeting Revenue	7100.00
Total Council on Medical Education Revenue	$12,700.00
Expenses:	
Survey Fees	$1000.00
Travel	1000.00
Dr. Sheldon	
CME Coordinator	
Site Survey Coordinator	
Council Catering	500.00
4 meetings per year	
Accreditation	800.00
Conference Registration	800.00
Dr. Sheldon	
CME Coordinator	
CME Provider	4500.00
Annual meeting	
PAI grant subsidy	
Total Council on Medical Education Expenses	$8,600.00
CME Excess Revenue Over Expenses	**$4,100.00**

(financial statements continued on next page)

Financial Statements *(continued)*

OSMA MEMBER SERVICE FOR-PROFIT CORPORATION
1997 Revised Budget

Revenue	
Stillwater National Bank	$ 7,000
C.L. Frates	8,000
I.C. Systems	6,000
Destinations	200
Speed Press	300
Tax Resource	1,000
Conomikes	750
Autoflex	500
UPAL	750
Bank Interest	300
Total Revenue	$24,800
Expenses	
Federal & State Taxes	$ 3,000
Tax Return	500
Other	1,000
Total Expenses	$ 4,500
Excess of Revenue over Expenses	$20,300

1997 FIRST QUARTER REPORT

Oklahoma State Medical Association
STATEMENT OF FINANCIAL POSITION

	YTD Feb. 28 1997	YTD Feb. 28 1996
Assets		
Current Assets		
Cash and cash equivalents	$1,227,441	$1,156,487
Investments	1,198,660	661,703
Accounts receivable	331,562	181,436
Inventory	18,013	0
Prepaid insurance	5,933	8,674
Total Current Assets	2,781,609	2,008,300
Property And Equipment		
Land	7,808	7,808
Building and improvements	486,857	479,007
Furniture, fixtures and equipment	456,561	283,755
	951,226	770,570
Less: accumulated depreciation and amortization	323,232	318,250
Total Property and Equipment	627,994	452,320
Other Investments		
Investment—OSMA Mbr. Serv. Corp.	13,463	15,654
PLICO Investment	15,302,775	7,420,21
Total Other Investments	15,316,238	7,435,873
Total Assets	$18,725,841	$ 9,896,493

	YTD Feb. 28 1997	YTD Feb. 28 1996
Liabilities And Net Assets		
Liabilities		
Current Liabilities		
Accounts payable	$ 3,747	$ 24,358
Deferred membership dues	941,865	928,789
Deferred Revenue—Journal	1,610	0
Dues payable	23,044	39,147
Total Current Liabilities	970,266	992,294
Long Term Liabilities		
Accrued pension liability	210,388	0
Total Long Term Liabilities	210,383	0
Total Liabilities	1,180,654	992,294
Net Assets		
Unrestricted		
Unrestricted net assets	1,425,540	1,175,870
Prior period—PLICO adjustment	500,000	0
Increase in unrestricted net assets	85,402	83,635
Total Unrestricted	2,010,942	1,259,505
Temporarily Restricted		
Temp. restrd-C. Leebron Memorial	5,278	5,583
Temp. restrd-Loan—Scholarship	91,819	88,580
Temp. restrd—Tort Reform Fund	126,927	122,635
Temp. restrd—M. Johnson Memorial	7,446	7,677
Total Temporarily Restricted	231,470	224,475
Permanently Restricted		
Perm. restrd net assets—PLICO	15,302,775	7,420,219
Total Permanently Restricted	15,302,775	7,420,219
Total Net Assets	17,545,187	8,904,199
Total Liabilities and Net Assets	$18,725,841	$ 9,896,493

Oklahoma State Medical Association
Statement of Activities for Two Months Ending February 28, 1997—Support and Revenue

	Actual Mnth of Feb. 1997	% of Feb. Total Gross Revenue	Revised Budget Mnth of Feb. 1997	% of Feb. Revised Budget	YTD Mnth End Feb. 28 1997	%ofYTD Total Gross Revenue	Revised YTDBgt. MnthEnd Feb. 28 1997	%YTD Revised Budget	Act.YTD Mnth End Feb. 28 1996	% YTD Total Gross Rev.
Support & Revenue										
OSMA Membership Dues	86,687	70.2	86,666	100.0	173,373	49.7	173,332	100.0	160,000	42.7
Interest Revenue—Other	9,014	7.3	9,166	98.3	18,999	5.4	18,332	103.6	18,636	5.0
Interest Revenue—PLICO	0	0.0	0	0.0	0	0.0	0	0.0	10,000	2.7
AMA Commissions	0	0.0	3,916	0.0	1,804	0.5	7,832	23.0	21,548	5.8
Building Lease	1,400	1.1	3,100	45.2	18,200	5.2	6,200	293.6	2,284	0.6
Directory Sales & Advertising	6,375	5.2	5,833	109.3	10,100	2.9	11,666	86.6	23,880	6.4
Computer Label Sales	1,025	0.8	666	154.0	1,961	0.6	1,332	147.3	1,400	0.3
Member Service For-Profit Corp.	0	0.0	1,666	0.0	0	0.0	3,332	0.0	0	0.0
Member Service Council	240	0.2	2,916	8.2	540	0.1	5,832	9.3	16,060	4.3
Contract with Subsidiary—PLICO	0	0.0	28,125	0.0	84,375	24.2	56,250	150.0	72,375	19.3
Other	217	0.2	2,083	10.4	1,307	0.4	4,166	31.4	14,899	3.9
Total Support & Revenue	104,958	85.0	144,137	72.8	310,659	89.0	288,274	107.8	341,082	91.0
Journal Support and Revenue										
Subscription	350	0.3	166	210.8	350	0.0	332	105.4	400	0.1
OSMA Dues Allocation	5,000	4.1	5,000	100.0	10,000	2.9	10,000	100.0	10,000	2.7
Advertising	3,500	2.8	4,166	84.0	8,618	2.5	8,332	103.4	10,459	2.8
Total Journal Support & Revenue	8,850	7.2	9,332	94.8	18,968	5.4	18,664	101.6	20,859	5.6
Annual Meeting Support and Revenue										
Exhibit Fees	6,820	5.5	1,666	409.4	14,003	4.1	3,332	420.2	6,750	1.8
OSMA Dues Allocation	2,500	2.0	2,500	100.0	5,000	1.4	5,000	100.0	5,000	1.3
Ticket Sales	350	0.3	1,041	33.6	350	0.1	2,082	16.8	1,160	0.3
Total Annual Meet. Support & Rev.	9,670	7.8	5,207	185.7	19,353	5.6	10,414	185.8	12,910	3.4
Total Gross Support and Revenue	123,478	100.0	158,676	77.8	348,980	100.0	317,352	110.0	374,851	100.0

Oklahoma State Medical Association
Statement of Activities for Two Months Endeding February 28, 1997—Services and Expenses

	Actual Mnth of Feb. 1997	% of Feb. Total Gross Revenue	Revised Budget Mnth of Feb. 1997	% of Feb. Revised Budget	YTD Mnth End Feb. 28 1997	%ofYTD Total Gross Expenses	Revised YTDBgt. MnthEnd Feb. 28 1997	%YTD Revised Budget	Act.YTD Mnth End Feb. 28 1996	%ofYTD Total Gross Expen.
Program Services										
Council & Committee Expenses										
Prof. & Public Relations	1,632	1.3	4,416	37.0	3,595	1.4	8,832	40.7	23,009	7.9
Planning & Development	0	0.0	416	0.0	2,187	0.8	832	262.8	0	0.0
Medical Services	0	0.0	83	0.0	0	0.0	166	0.000	0 0	
Member Services	(66)	0.0	1,666	(3.9)	257	0.1	3,332	7.7	15,880	5.4
Public & Mental Health	0	0.0	83	0.0	0	0.0	166	0.00	0	0.0
State Legislation	8,083	6.5	7,708	104.9	13,704	5.2	15,416	88.9	18,800	6.5
Governmental Activities	2,163	1.8	2,916	74.2	4,246	1.6	5,832	72.8	5,010	1.7
Organized Medical Staff Section	0	0.0	83	0.0	0	0.0	166	0.0	0	0.0
Alliance Activities	0	0.0	833	0.0	50	0.0	1,666	3.0	142	0.1
Student Activities	0	0.0	833	0.0	0	0.0	1,666	0.0	98	0.0
Resident Activities	0	0.0	166	0.0	0	0.0	332	0.0	0	0.0
Rural Health	0	0.0	83	0.0	0	0.0	166	0.0	0	0.0
Young Physician Section	0	0.0	208	0.0	0	0.0	416	0.0	0	0.0

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	Actual Mnth of Feb. 1997	% of Feb. Total Gross Revenue	Revised Budget Mnth of Feb. 1997	% of Feb. Revised Budget	YTD Mnth End Feb. 28 1997	%ofYTD Total Gross Expenses	Revised YTDBgt. MnthEnd Feb. 28 1997	%YTD Revised Budget	Act.YTD Mnth End Feb. 28 1996	%ofYTD Total Gross Expen.
10% Contingency	0	0.0	1,958	0.0	0	0.0	3,916	0.0	0	0.0
International Medical Graduates	0	0.0	83	0.0	0	0.0	166	0.0	0	0.0
Total Council & Committee Expenses	11,812	9.6	21,535	54.9	24,039	9.1	43,070	55.8	62,939	21.6
Contract with Subsidiary—PLICO										
Seminar Supplies	0	0.0	0	0.0	0	0.0	0	0.0	316	0.1
Seminar Clerical	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Seminar Speakers & Sponsors	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Seminar Meeting Rooms	0	0.0	0	0.0	0	0.0	0	0.0	550	0.2
Seminar Refreshments	0	0.0	0	0.0	0	0.0	0	0.0	1,135	0.3
Seminar Equipment	0	0.0	0	0.0	0	0.0	0	0.0	123	0.0
Seminar & Newsletter Printing	0	0.0	0	0.0	0	0.0	0	0.0	2,150	0.8
Newsletter Mailing Service	0	0.0	0	0.0	0	0.0	0	0.0	450	0.1
Newsletter Postage	0	0.0	0	0 0	0	0 0	0	0 0	3,000	1.1
Membership Dues & Registrations	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Travel, Hotels, Meals, Misc.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Resource Material	0	0 0	0	0.0	0	0.0	0	0.0	0	0.0
Auto Payment	0	0.0	0	0 0	0	0 0	0	0 0	0	0.0
Auto Maintenance	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Administrative & Clerical	0	0.0	0	0.0	0	0.0	0	0.0	4.775	1.7
Total Contract with Subsidiary Expenses	0	0.0	0	0.0	0	0.0	0	0.0	12,499	4.3
Program Services										
Journal Expenses										
Salaries	0	0.0	0	0.0	0	0.0	0	0.0	6.000	2.1
Printing	6,146	5.0	7,208	85.3	6,147	1.8	14,416	42.6	14,291	4.9
Art work	267	0.2	625	42.7	1,836	0.5	1,250	146.8	1,740	0.6
Proofreading	0	0.0	83	0.0	58	0.0	166	34.9	54	0.0
Operating	1,900	1.5	750	253.3	1,965	0.6	1,500	131.0	4,565	1.6
Total Journal Expenses	8,313	6.7	8,666	95.9	10,00	62.9	17,332	57.7	26,650	9.2
Annual Meeting Expenses										
Travel	0	0.0	41	0.0	0	0.0	82	0.0	78	0.0
Exhibits	0	0.0	125	0.0	0	0.0	250	0.0	0	0.0
Photo	0	0.0	83	0.0	0	0.0	166	0.0	0	0.0
Planning	0	0.0	8	0.0	0	0.0	16	0.0	0	0.0
Printing	2,716	2.2	583	465.8	2,716	0.8	1,166	232.9	387	0.2
Supplies	121	0.1	533	22.8	121	0.0	1,066	11.4	144	0.0
Speakers	0	0.0	125	0.0	0	0.0	250	0.0	0	0.0
Entertainment	600	0.5	416	144.2	600	0.2	832	72.1	0	0.0
Signs/Security	0	0.0	83	0.0	0	0.0	166	0.0	0	0.0
Audio visual	0	0.0	62	0.0	0	0.0	124	0.0	0	0.0
Awards/Trophies	0	0.0	187	0.0	0	0.0	374	0.0	72	0.0
Hotel/Convention	0	0.0	2,666	0.0	0	0.0	5,332	0.0	0	0.0
Flowers	0	0.0	83	0.0	0	0.0	166	0.0	0	0.0
Total Annual Meeting Expenses	3,437	2.8	4,995	68.8	3,437	1.0	9,990	34.4	681	0.2
Total Expenses	151,598	122.8	154,042	98.4	263,578	100.0	308,070	85.6	291,216	100.0
Increase in Unrestricted Net Assets	(28,120)	(22.7)	4,634	(606.8)	85,402	32.4	9,282	920.1	83,635	28.7

(financial report continued on next page)

REFERENCE COMMITTEE II

REPORT OF REFERENCE COMMITTEE II

(A-97)
Presented by: Michael Clendenin, MD, Chair

Mr. Speaker and Members of the House of Delegates:
Reference Committee II gave careful consideration to the several items referred to it and submits the following report:

(1) Report of the OSMA *Journal*
Recommendation:
Mr. Speaker, your Reference Committee recommends to adopt the Report of the OSMA *Journal* with the following amendment:

It is recommended that publication of the *Journal of the Oklahoma State Medical Association* be continued on a monthly basis and that the use of saddlestitch binding be utilized as needed. It is also recommended that the scope of the *Journal* be changed to include articles other than those which are scientific in nature.

(2) Resolution 8: Reducing Unintended Pregnancy through Adequate Funding of Family Planning
Recommendation:
Mr. Speaker, your Reference Committee recommends to adopt Resolution 8 with the following amendment to the second *Resolved:*

Resolved, That the Oklahoma State Medical Association supports the concept that all pregnancies should be intended at conception and supports increased state funding for the expansion of family planning services in an effort to reduce unintended pregnancies and their associated health and social costs;

Statement of Activities for the Two Months Ending February 1997

	Act. Mnth of Feb. 1997	% of Feb. Total Gross Revenue	Revised Budget Mnth of Feb. 1997	% of Revsd Feb. Budget	Act. YTD MnthEnd Feb. 28 1997	%ofYTD Total Gross Expenses	Revised YTDBudget Mnth End Feb. 28 1997	% of YTD Revised Budget	Act. YTD Mnth End Feb. 28 1996	%YTD Total Gross Expenses
Supporting Services										
Membership Expenses										
Salaries	52,453	42.5	39,583	132.5	86,140	32.7	79,166	108.9	74,412	25.6
Payroll Taxes	6,649	5.4	3,750	177.3	9,307	3.6	7,500	124.1	6,517	2.2
Pension Plan	0	0.0	2,916	0.0	2,462	0.9	5,832	42.2	11,203	3.8
Fee-Terminate Old Pension Plan	0	0.0	13,334	0.0	255	0.2	26,668	0.1	0	0.0
Health Insurance	2,042	1.6	3,916	52.2	2,042	0.8	7,832	26.1	5,097	1.8
Staff & Officers	17,721	14.4	6,250	283.5	19,026	7.3	12,500	152.2	8,131	2.8
CEO Search	113	0.1	1,250	9.1	113	0.0	2,500	4.5	0	0.0
Disability Income Insurance	247	0.2	266	93.0	518	0.3	532	97.4	328	0.1
Auto Allowance	(2,152)	(1.6)	0	0 0	0	0.0	0	0.0	6,380	2.2
Travel	0	0.0	83	0.0	0	0.0	166	0.0	0	0.0
Office Supplies	2,321	1.9	4,167	55.7	8,047	3.2	8,334	96.6	8,381	2.9
Equipment Repairs & Service	0	0.0	250	0.0	0	0.1	500	0.0	0	0.0
Postage	17,689	14.2	4,166	424.6	23,235	8.8	8,332	278.9	9,080	3.1
Telephone	1,755	1.4	2,500	70.2	3,826	1.5	5,000	76.5	5,310	1.8
General Insurance	11,774	9.4	2,916	403.8	11,774	4.5	5,832	201.9	1,863	0.6
Utilities	1,667	1.4	1,834	90.9	3,558	1.4	3,668	97.0	3,370	1.2
Services	330	0.3	500	66.0	583	0.3	1,000	58.3	1,002	0.3
Building Maintenance & Repairs	793	0.6	1,750	45.3	3,221	1.2	3,500	92.0	3,097	1.1
Yard Maintenance	409	0.3	584	70.1	818	0.3	1,168	70.1	1,295	0.4
Accounting	575	0.5	1,125	51.1	1,000	0.4	2,250	44.4	0	0.0
Legal	1,200	1.0	5,166	23.2	1,200	0.5	10,332	11.6	0	0.0
Computer	2,687	2.2	2,916	92.2	3,377	1.3	5,832	57.9	4,582	1.6
Internet	38	0.0	1,250	3.0	140	0.0	2,500	5.6	0	0.0
Computer Upgrade	1,200	1.0	2,000	60.0	21,764	8.4	4,000	544.1	0	0.0
Dues & Subscriptions	308	0.3	1,000	30.8	787	0.3	2,000	39.3	1,253	0.5
Awards & Contributions	33	0.0	291	11.2	233	0.2	582	40.0	914	0.2
County Society Dues Commission	5,867	4.7	2,250	260.7	20,234	7.8	4,500	449.7	25,544	8.8
AMA Convention	839	0.7	7,083	11.9	642	0.3	14,166	4.5	240	0.1
Depreciation Expense	0	0.0	4,583	0.0	0	0.0	9,166	0.0	9,862	3.4
Trustee Fees OSHA Reserves	747	0.6	333	224.3	747	0.3	666	112.1	413	0.1
Other Operating	731	0.6	834	87.7	1,047	0.4	1,668	62.8	173	0.1
Total Membership Expense	128,036	103.7	118,846	107.7	226,096	87.0	237,692	95.1	188,447	64.7

(Financial report continued on next page)

Reference Committee II *(continued)*

(3) Resolution 10: Physician Recognition Program
Recommendation:
Mr. Speaker, your Reference Committee recommends that Resolution 10 *not* be adopted.

(4) Resolution 16: Access to Sterile Syringes
Recommendation:
Mr. Speaker, your Reference Committee recommends that Resolution 16 *not* be adopted.

(5) Resolution 17: Reducing HIV/STD Transmission through Consistent and Correct Condom Usage
Recommendation:
Mr. Speaker, your Reference Committee recommends to adopt Resolution 17 with the following amendment to the second Resolved:

> Resolved, That the Oklahoma State Medical Association support programs that emphasize condom usage for people at risk of contracting HIV and other sexually transmitted diseases.

(6) Resolution 18: Tobacco & School Publications
Recommendation:
Mr. Speaker, your Reference Committee recommends that Resolution 18 *not* be adopted.

(7) Resolution 19: Tobacco Advertising
Recommendation:
Mr. Speaker, your Reference Committee recommends that Resolution 19 be adopted with the following amendment by adding a second *Resolved* that reads as follows:

> *Resolved,* That the Oklahoma State Medical Association members and the Oklahoma State Medical Association Alliance members work with local school boards to inform them of school publications that promote unhealthy life styles and substitute them with publications that encourage healthy life styles for young people.

(8) Resolution 23: Telemedicine project with the AMA Bioethics Center
Recommendation:
Mr. Speaker, your Reference Committee recommends that Corrected Resolution 23 be adopted with the following amendment to the first *Resolved:*

> *Resolved,* That the OSMA develop a telemedicine project jointly with the AMA Center of Ethics which will be made available to all OSMA members;

(9) Late Resolution 28: Congressional Delegation to Support HR 586
Resolution:
Mr. Speaker, your Reference Committee recommends that Late Resolution 28 be adopted with the following amendment to the second *Resolved:*

> *Resolved,* That the President of the Oklahoma State Medical Association write a letter to Representative Steve Largent strongly encouraging him to remain as an author on bill number HR 586.

Consent Calendar

Recommended for Adoption:

(10) Report of the Council on Profes-

EDUCATION & RESEARCH FOUNDATION
Midfirst Bank
Jan. 1, 1997 - Feb. 28, 1997

	Revenue	Expenses
Checking Account #1301002376 Balance		$ 6,261
Savings Account #1801002384 Balance		65,106
Total Beginning Balance 1/1/97		$ 71,367
Foundation		
Bank interest less charges	$ 392	$
IRS		4,849
Physician Recovery Program		
PLICO contribution	125,000	
Dental Assoc. contribution	2,000	
Osteopathic Assoc. contribution	6,000	
Contributions	300	
	133,300	
Director—Salary		18,167
Assistant Directors—Salary		4,000
		22,167
Council on Medical Education		
Institute of Mental Health	1,000	
Survey and Travel		1,188
Catering		110
		1,298
Total Revenue	$134,692	
Total Expenses		$ 28,314
Revenue over Expenses		$106,378
MidFirst Checking Account Balance		$ 18,019
MidFirst Savings Account Balance		159,726
Total Cash in Bank 2/28/97		$177,745

sional and Public Relations
Report Adopted

(11) Report of the Council on Public and Mental Health
Report Adopted

(12) Resolution 9: Reporting Immunizations to the Oklahoma State Immunization Information System
Resolution Adopted.

(13) Resolution 11: Support of Breastfeeding
Resolution Adopted

(14) Resolution 12: Women's Health
Resolution Adopted

(15) Resolution 13: Men's Health
Resolution Adopted

(16) Resolution 22: Rabies Public Awareness Program
Resolution Adopted

(17) Late Resolution 27: Insurance Coverage for Immunizations
Resolution Adopted

(18) Late Resolution 29: Practice Expenses
Resolution Adopted

Filed for Information:

(19) Report of the Council on Medical Services
Report is filed for information

(20) Report of the Internet Advisory Committee
Report is filed for information

(21) Report of the Medical Students Section
Report is filed for information

(22) Report of the Organized Medical Staff Section
Report is filed for information

(23) Report of the Young Physicians Section
Report is filed for information

Mr. Speaker, your Reference Committee recommends adoption of the Report of Reference Committee II as a whole.

Mr. Speaker, this concludes the Report of Reference Committee II. Your Reference Committee wishes to thank all who participated in the hearing and contributed to the preparation of this report. As Chairman, I would like to thank the other Reference Committee members and OSMA Staff, Lyle Kelsey and Toni Farrar.

MEMBER SERVICE FOR-PROFIT CORPORATION
Boatmen's First National Bank
Jan. 1, 1997 - Feb. 28, 1997

Checking Account #194743 Balance			$ 727
Savings Account #194581 Balance			22,921
Total Beginning Balance 1/1/97			$23,648
	Revenue		Expenses
Revenue:			
Stillwater Natl. Bank	$ 1.232		
Utica Physicians Assoc.	563		
C.L. Frates	1,500		
Destinations	72		
Tax Resource	855		
Conomikes	662		
I.C. System	382		
Auto Flex	500		
	5,766		
Interest less bank charges:		$ 83	
Expenses:			0
Total Revenue	$ 5,849		
Total Expenses			$ 0
Revenue over Expenses			$ 5,849
Boatmen's Checking Account Balance			$ 709
Boatmen's Savings Account Balance			28,788
Total Cash in Bank 2/28/97			$29,497

MEMEBERSHIP REPORT

April 1, 1997

Regular Membership	3704
Affiliate Members	11
Life Members	499
Junior Members	485
Students	305
Special (Partial or Dues Exempt)	25
Total	5029

There are 871 non-members listed on the OSMA file.

Nominated for OSMA Life Membership were Richard F. Barbee, MD, Tulsa; Ann K. Kent, MD, Muskogee; Delbert McGinnis, MD, Oklahoma City; Irwin McLendon, MD, Yukon; Jesse F. Richardson, MD, Stillwater; and Layton Sutton, MD, Ardmore.

ReferEnce Committee II *(continued)*

Respectfully submitted,
Michael Clendenin, MD, Chair, Tulsa
Deborah Huff, MD, Oklahoma City
Donald Horton, MD, Oklahoma City
Russell Postier, MD, Oklahoma City
Jack Beller, MD, Norman
Lara Larson, MD, Tulsa
David Thomas, MD, Tulsa
David Harris, MD, Tulsa
Rosemary Bellino, MD, Lawton
Jana Armstrong, MD, Resident
Elizabeth Jett, MSII

REPORT OF THE COUNCIL ON PROFESSIONAL AND PUBLIC RELATIONS

Reference Committee II (A-97)
Subject: Annual Report
Presented by: John R. Alexander, MD, and Michael Haugh, MD, Co-Chairs
Referred to: Reference Committee II

Introduction:
The Council on Professional and Public Relations is responsible for the internal and external communications of the Oklahoma State Medical Association, including maintaining understanding about medical issues among patients and physicians and keeping members informed about policies of the Association.

Review of Activities:

OSMA Online: This was the first full year for the OSMA to have a presence on the World Wide Web. The OSMA site contains a public side and a password protected physician member side. Information contained on the public website includes topics such as general information about the OSMA, membership information, answers to legal questions of a general nature, access to OSMA publications and links to the American Medical Association and other state health organization's websites. The physician member side contains council and committee information, OSMA publications, federal and state legislative information and links, a subscriber list with e-mail addresses, and links to websites of interest to physicians.

Due to a shortage of assigned staff personnel for this project and difficulty with the turnaround time of the service provider, the website has not been as well-maintained as anticipated. Plans are underway to use another Internet provider to host the website and to provide additional staff or contract labor to update and maintain the information on OSMA's homepage on a more timely basis.

The Council encourages all OSMA members to subscribe to the Internet and register to have access to OSMA Online.

Living Will: The OSMA continued its cooperative effort with the Oklahoma Bar Association to publicize and distribute Oklahoma's Directive to Physicians, to physicians and patients. Over 15,000 Living Wills, and explanatory brochures and wallet cards were requested by Oklahoma physicians.

The material remains available at no cost to Oklahoma physicians.

Year in Review: The OSMA provides many services to its members but in the course of a busy practice, it is easy to overlook or forget just what the OSMA accomplishes for Oklahoma physicians every year. The Council believes it is necessary to remind OSMA members what the OSMA does on their behalf. Therefore, the Council produces a *Year in Review,* an annual report to the members on OSMA activities.

OSMA News*/OSMA *Journal: The Council continues to oversee production of the *OSMA News,* a monthly newsletter that provides OSMA members with timely information regarding the state of medicine in Oklahoma.

The Council continues to support the award-winning *Journal of the Oklahoma State Medical Association.*

Media Liaison: The Council serves as the OSMA's liaison with print and electronic media in Oklahoma. The OSMA is the primary source for the state's media when seeking information about medical issues.

The Council will continue to work with other Councils and the OSMA Alliance to identify programs that will portray physicians positively, offer programs on medicine and health to the public, and serve the public health.

Recommendations:

(1) Expand the development of electronic communications through the Internet and the OSMA home page.

(2) Continue to produce the *OSMA News* and support the *Journal of the Oklahoma State Medical Association.*

(3) Work with speciality societies to develop cooperative programs.

(4) Continue to produce the annual publication and *A Year in Review.*

(5) Continue to publicize Oklahoma's Living Will.

(6) Produce radio and television public service announcements and infomercials as needed.

(7) Produce pamphlets and brochures on medical or socioeconomic topics as needed.

(8) Continue to serve as the OSMA's liaison with the public and the media.

Budget Request: $53,000

Respectfully submitted,
John Alexander, MD, Co-chair
Michael Haugh, MD, Co-chair
Robert Allred, MD
Bonnie Ashing, MD
Lawrence Cibula, MD
William Condrin, MD
M. Joe Crosthwait, MD
Norman Dunitz, MD
Jeanne Ann King, MD
Stephen Lester, MD
Gary Massad, MD
Paul Massad, MD
Joseph Moore, MD
Ruth Oneson, MD
Michael Talley, MD
Michael Winzenread, MD
Mrs. Doris Edge
Mrs. Edie Gregory
Donnie Tyler, MS II

REPORT OF THE COUNCIL ON PUBLIC AND MENTAL HEALTH

Reference Committee II (A-97)
Subject: Annual Report
Presented by: Robert M. Mahaffey, MD
Referred to: Reference Committee II

Introduction:
It is the goal of the Council on Public and Mental Health to provide the citizens of Oklahoma, as well as OSMA members, with timely information regarding the medical aspects of public and mental health and oversee programs in these areas.

Review of Activities:

Maternal HIV Testing: The Council is pleased to report that the Council's Perinatal Task Force resolution on mandatory HIV testing for all pregnant women last year, which resolution was passed on by the OSMA House of Delegates to the AMA, was adopted by the American Medical Association House of Delegates last June.

Tobacco: Tobacco abuse is one of the primary concerns of the Council. This year the Council continued to support legislation increasing the penalties for tobacco sales to minors (Senate Bill 619) and legislation limiting smoking in state or government owned facilities (Senate Bill 60). However, the tobacco lobby remains strong in Oklahoma and much more legislation is needed.

The Council formally supported Drew Edmonson in his lawsuit against the tobacco industry to recover Medicaid funds spent to treat Oklahomans for tobacco related illnesses. The Council recommends the OSMA consider having the Attorney General address the House of Delegates in the near future in regard to these tobacco issues.

The Council also recommends the House of Delegates consider Resolution #19, limiting the advertising of tobacco products.

HIV-Related Issues: The Council's committee on HIV related issues was relatively quiet this year, but the Council does feel that legislation regarding access to sterile syringes without a prescription is needed. See Resolution #16.

Access to medical care for the indigent and uninsured: The Council continues to address the problems of the medically indigent. SoonerCare and its impact on rural physicians and pediatricians was discussed on several occasions. The Council's concern about this issue is addressed in Resolution #21. The Council is also concerned that any money that potentially could be saved is remitted to the State and not back into health care. The issue of providing services for this group of patients was further highlighted by Dr. Deckert in his State of the State address to the Council where he noted that Oklahoma is 7th highest among the 50 states in number of medically uninsured. The Council supported his recommendation of the formation of a consortium to seriously address the issues of improving the health of Oklahoma, which has come to pass.

The Council also assisted the Health Department in encouraging physicians to complete the Oklahoma Child Health Primary Care Assessment form by seeing that is was distributed at several County Medical Society meetings.

Home Care: The Council's ad hoc committee on home health continued to study the problems of home health care in Oklahoma this past year. The Council helped publish in the *OSMA News* the new federal legislation that penalizes physicians who certify that an individual is eligible for home health services if that physician has knowledge the individual does not qualify for such services. House Bill 2648 (which relates to the Home Health Care industry) passed, and the first session of rules writing in regards to definitions of solicitation, harassment, coercion, etc. have been defined. A number of other key items are in the bill, including precluding an agency from evaluating a client until it receives a physician's order. The 2nd session of rules writing is currently underway. A new ethics handbook is now available, and the Physicians Handbook on home health care has been revised, and includes a new section entitled "Taking Control of Your Home Health Practice" (available at this meeting in the booth sponsored by the Oklahoma Association of Home Care - OAHC.) The President of the Home Care Association is available to speak at county section meetings. After the last session of rules writing on House Bill 2648 is finished later this year, the Council's Ad Hoc Committee on Home Health Care plans to continue to work with representatives of the home health care industry to develop physician educational material, such as a carry card for doctors, audio programs for CME, to develop an educational PR program for newspapers, radio, TV, a speaker's bureau, a joint OSMA/OAHC press conference, and explore additional legislation and regulations that will help curb abuse of home health care in Oklahoma. Last year's resolution on home health care resulted in a pilot project that HCFA and Blue Cross/Blue Shield of South Carolina undertook to audit the top 25 Medicare Home Health Care Agencies in Oklahoma in regards to appropriateness of care and homebound status.

The Council has also recommended this year that OSMA consider Resolution #20 in regard to preventing abuse of home health care in Oklahoma.

The Council went on record as opposing physician assisted suicide.

Immunizations: The Council in its role of preventing disease, supported OSMA's bill, Senate Bill 277, which requires insurance companies in Oklahoma to provide full immunization coverage for children until age 18. To further address the problem of under immunization in Oklahoma, the Council is recommending Resolutions 9 & 10 relating to the reporting of immunizations to the Oklahoma State Immunization Information System and to recognize physicians who reach a 90% immunization coverage.

The Council met with Richard Hess, representing the Veterinarian Association, in regard to vaccination for animals and went on record as fully supporting a rabies awareness program.

Women's health also has remained a concern of the Council, and occupied several discussions this past year. Resolutions 11 & 12 are regarding breast feeding and women's health, respectively.

The issue of who is responsible for the overall health of Oklahoma and how this can be addressed, will be a major priority for the Council this year.

Conclusion:
Recommendations:

1. Interface with the Oklahoma State Department of Health and Mental Health, the OU College of Public Health, the

Public and Mental Health *(cont.)*

OU College of Medicine, the Physician Manpower Training Commission, and the Oklahoma Health Care Authority.

2. Continue to support the Perinatal Task Force, Maternal Mortality Committee, the Committee on HIV related issues, and the Ad Hoc Committee on Home Health.

3. Continue to develop initiatives to alleviate the problem of access to medical care for the indigent and uninsured.

4. Continue to work on improving immunization rates in Oklahoma.

5. Continue to interface with the OSMA Councils on State Legislation and Regulation and Professional and Public Relations to achieve a smoke-free Oklahoma and work on other issues in Public Health areas.

6. Work with the Tobacco Free Coalition and the American Lung Association on tobacco issues.

Budget: $1,000

Respectfully submitted,
Robert M. Mahaffey, MD, Chair
Chester Bynum, MD
Edgar Cleaver, MD
Mr. Judy Critchfield, OSMA Alliance
Kathy Musson, Staff

REPORT OF THE COUNCIL ON MEDICAL SERVICES

Reference Committee II (A-97)
Subject: Annual Report
Presented by: James P. Hutton, MD
Referred to: Reference Committee II

Introduction

The Council reviews and makes recommendations concerning various third party payors, managed care organizations, and governmental agencies that impact the delivery of quality medical care in Oklahoma. As an ongoing service to the public, the Council handles grievances between patients and physicians.

Just before Christmas 1996, OSMA members and staff were saddened to hear that long-time Council Chair, Ronald S. Barlow, MD, had passed away suddenly from a severe M.I. All who knew Dr. Barlow were most complimentary of his kind and gentle personality and his excellent example of a compassionate physician. He devoted a lot of time to the OSMA and will be missed. James P. Hutton, MD, Internal Disease, Tulsa, Vice Chair of the Medical Services Council stepped in to serve as Chair for the remainder of Dr. Barlow's term.

Since the last annual meeting, the council has responded to 35 complaints, 14 referred to Oklahoma County Medical Society, 1 referred to Oklahoma Hospital Association, 3 referred to other professional associations i.e. Osteopathic and Podiatry, and the remaining 16 were handled by the Council. There has been an increase in the number of complaint calls. However, many are handled on the telephone by the executive staff.

Review of Activities

The Council on Medical Services met on September 24, 1996, at the OSMA office and by conference call with physicians on the Council at the Tulsa County Medical Society.

The Council discussed the Medicaid "SoonerCare" program at some length. Of the total number of providers for rural areas (not Oklahoma City, Tulsa or Lawton—HMOs available)—572 MDs and DOs have signed contracts with SoonerCare. All counties are represented, except for Beaver County and Pontotoc County. Beaver will stay fee-for-service and will affect about 100 beneficiaries. Pontotoc County beneficiaries may be auto-assigned to bordering county providers—that affects about 800-1,000 people. There are about 60,000 Medicaid, AFDC recipients in all the rural areas. About 1,000 chose to join the urban HMOs. About 42% of all beneficiaries self-selected a primary care physician; the remaining are being auto-assigned to a physician. In northeast Oklahoma there are about 200 recipients that still need assigned a physician. About 800 in McAlister area and about 1,000 in Ada. Some concerns of the physicians are the reference to 24-hour care and the corresponding liability. Several rural communities have dealt with this problem by having separate contracts with the emergency rooms at the hospitals to handle the "after hours" services. The financial viability of the capitation aspect is also another concern. Some CPT codes are handled by capitation and the rest by fee-for-service. Physicians need to take time to analyze their practice to see how their office would fare on this kind of a contract. The Oklahoma Health Care Authority conducted a series of workshops around the state in January 1997 to discuss the Rural SoonerCare Program with physician participants.

The Health Care Authority (HCA) has redesigned the Medical Advisory Committee (MAC). Meetings are now being scheduled more frequently, and prior to, the HCA board meetings so recommendations can be made to the HCA Board. Frank Wilson, MD, is Chair of the MAC. There are six (6) physicians (MDs and DOs) on the MAC.

The Council also reviewed the Oklahoma State Education and Employees Group Insurance Board (OSEEGIB) "HealthChoice" program. They discussed a provider satisfaction survey with HealthChoice. There was a high degree of satisfaction by the physicians working within the network. OSMA has not heard a lot of complaints about the program other than in some reimbursements. OSMA has responded individually to those fee schedule issues. HealthChoice has a total network of about 8,166 providers. To date they have signed on about 5,500 additional employees with the universities around the state, which gives them a total of 146,000 employees—96,000 actual employees and the rest are dependents.

Budget: $1,000

Respectfully submitted,
James P. Hutton, MD, Chair
Michael J. Babb, MD
John R. Christiansen, MD
A. Paul Compton, MD
Donald L. Cooper, MD
Harriet W. Coussons, MD
Ross L. Fisher, MD
Kurt Frantz, MD

Jay A. Gregory, MD
Mark A. Kelley, MD
Bartis M. Kent, MD
Brent W. Laughlin, MD
Dennis R. Mask, MD
Gregory A. Parker, MD
John R. Perkins, MD
Donald R. Stout, MD

REPORT OF THE INTERNET ADVISORY COMMITTEE

Reference Committee H (A-97)
Subject: Annual Report
Presented by: Robert Finnegan, MD, Chair
Referred to: Reference Committee H

Introduction:
This is the first year that the Association has had an Internet Advisory Committee. The purpose for forming this committee was to advise OSMA staff with regards to the development of the OSMA website, *OSMA Online*.

OSMA Online was designed and promoted at last year's annual meeting. The site was designed for and dedicated to Oklahoma physicians. The Association, by using the latest technology, wanted to help physicians benefit from all the resources of the Internet. Resource information abounds on the Internet, and it is imperative that the appropriate links be maintained. Many journals, clinical resources, medical education libraries, public and private research, and disease specific databases are located on the Internet. The committee feels that with so much information, it is imperative that physician input be continued in order to provide appropriate links to the public, as well as to the physicians.

Review of Activities:
The Internet Advisory Committee met during the year and set various goals which they wanted to achieve. The development of a private OSMA "chat room" is underway. This would be a place that OSMA could hold meetings, forums, question and answer sessions, opinion polls, and various other activities via the electronic "super highway." Hopefully this will be up and running later this year.

The committee also wanted to develop the e-mail side of our site. We currently list the names of the physician subscribers to *OSMA Online* with their e-mail addresses. The committee hopes to develop a "blast" e-mail system whereby all physicians with e-mail addresses could be sent timely information, such as legislative updates, weekly newsletters, etc.

The committee also hopes to expand the public side of the site by providing important information to the public, including various public service announcements.

Use of the World Wide Web is vital in disseminating information to the physicians and the public in a more timely fashion than can currently be accomplished through mail; the committee feels this area of the Association should be expanded.

A change in the network which hosts *OSMA Online* is being considered. Staff has encountered many delays in the posting of the information by the current provider, which has resulted in a considerable lag in updates for the site. With a change in service providers, and additional staff input, the committee feels *OSMA Online* is certainly a step in the right direction and most essential if OSMA is to keep up with the fast pace of technology.

The committee was pleased to learn that the Association qualified for a grant from the AMA which provides training in the use of the Internet. The Physicians Accessing the Internet (PAI) Grant provides the resources necessary to bring in the computers and Internet trainers for the program. Emphasis is placed on how physicians can use the Internet to save time and get updated information electronically. The committee encourages physicians to attend this course during the Annual Meeting. Class sizes are limited to only 30 participants in order to allow "hands on" training at computers. The Internet Advisory Committee Chair, along with OSMA staff, will attend the session through the "train the trainers" program. Basically, this will then allow the Internet Committee to host a series of Internet training sessions around the state.

Conclusion:
The committee encourages all physicians to get "online" with an Internet service provider; then visit the OSMA's homepage at http://www.osmaonline. org.

Budget: $15,000

Respectfully submitted,
Robert F. Finnegan, MD, Chair
Andrew C. Gin, MD
Ray V. McIntyre, MD
J. Michael Pontious, MD
Roger E. Shelden, MD
Timothy A. Walker, MD
Daniel Washburn, MD
John Braswell, MSII
Kathy Musson, Staff

REPORT OF THE JOURNAL OF THE OKLAHOMA STATE MEDICAL ASSOCIATION

An Addendum to the Report of the Council on Professional and Public Relations

Subject: Annual Report
Presented by: Ray V. McIntyre, MD, Editor-in-Chief
Referred to: Reference Committee H

Introduction:
The award-winning *Journal of The Oklahoma State Medical Association* has maintained its position as one of the nation's finest medical publications by providing its readers with timely, significant scientific articles and special feature stories. It continues to serve as an open forum for the exploration and discussion of issues vital to the physicians of Oklahoma and remains a popular and important benefit of membership in the association.

Awards:
The winners of the $500 Charlotte S. Leebron Award, presented annually to the author(s) of the "most worthy" scientific paper published during the year, are Robert M. Hamm, PhD; Ronald J. Hicks, MD; and Debra A. Bemben, PhD,

of Oklahoma City for their paper "Antibiotics and Respiratory Infections: Do Antibiotic Prescriptions Improve Outcomes?" The paper was published in the August 1996 *Journal.*

The award for the best *Journal* cover photograph submitted by a physician goes to Robert M. Smith, MD, Oklahoma City, for his striking photograph of a sunrise over the North Canadian River, featured on the September 1996 cover.

The Mark R. Johnson Award for Excellence in Medical Writing, a $500 cash award to the medical student or resident submitting the best scientific paper or commentary, goes to Ahmed Amayem, MD, anesthesiology resident in Oklahoma City. He was the lead author of the paper, "A Case of Unexplained Desaturation During Laparoscopic Cholecystectomy," published in the April 1996 *Journal.*

Journal awards are presented each spring at the OSMA's Annual Meeting.

Review of Activities:
The *Journal's* Leaders in Medicine series continues, focusing on state physicians who have made significant contributions to Oklahoma medicine and who, in the opinion of the Editorial Board, deserve to be recognized for their accomplishments. Since last April the series has featured G. Rainey Williams, MD (June 1996), Rayburne W. Goen, Sr., MD (October 1996), and Edward R. Munnell, MD (February 1997). To date, 33 physicians have been featured in the series, which began in 1981.

In 1996, the *Journal* published a total of 24 scientific manuscripts and 14 other feature articles representing the work of 82 individual authors.

In February 1997, the *Journal's* press run was 5,050. Of those, 4,874 were mailed, with the breakdown as follows: active members, 3,653; affiliate members, 10; life members, 504; residents, 473; agencies, 1; complimentary, 19; exchanges, 55; paid, 123; and advertisers, 37. Life members, agencies, and complementaries, a total of 524, are mailed at no charge to the recipient.

Budget Notes:
Subscription rates for 1997 are unchanged from 1996, $20 a year for members and $30 a year for non-members. No increase was voted for 1998. With approximately 4,200 regular members, residents, and students paying $20 each, subscription income is approximately $84,000. Some 130 other subscriptions from outside the association (individuals and medical libraries) are paid at the nonmember rate of $30, adding $3900 to the total. Free subscriptions to approximately 500 Life Members constitute an annual expense to the association of $10,000.

The *Journal's* advertising rates will be not be increased for 1998. A 6% increase was instituted for 1997. Production charges from the Transcript Press for 1997—$75,011 including tax and freight—were well below the 1996 total of $84,211. The decrease is attributable primarily to a decrease in the number of pages per issue and the change from perfect binding to saddlestitch binding, instituted with the August 1996 issue. Charges from the Graphic Art Center for cover art production during the year were approximately $3,200, the same as in 1995.

With a total of 60,900 copies actually printed in 1996, the average production cost per copy was $1.23 (vs. $1.41 in 1995). Second class postage varies depending on the weight of each issue and its number of advertising pages, but has risen in the last few years and now averages about $800 per month, or $9600 a year.

From these figures, one can calculate that producing and mailing the *Journal* in 1996 cost approximately $1.45 per copy.

Recommendation:
At the March 6 meeting of the *Journal's* Editorial Board, there was a lengthy discussion of the decreasing number of manuscripts being submitted to the *Journal* for consideration for publication. With the submission of quality manuscripts at the lowest level in memory, the board moved, seconded, and approved the following recommendation to the OSMA Board of Trustees:

That publication of the *Journal of the Oklahoma State Medical Association* be changed from monthly to bimonthly, and that the use of saddlestitch binding be continued.

It was suggested that Ms. Records decide, based on the *Journal's* production schedule and the need to advise advertisers in advance, whether May or June should be the first issue skipped.

Respectfully submitted,
Ray V. McIntyre, MD, Editor-in-Chief
Robert L. Scott, MD, Editor
M. DeWayne Andrews, MD, Editor
Ruth H. Oneson, MD, Associate Editor
J. Michael Pontious, MD,
Associate Editor
David M. Selby, MD, Associate Editor
Clifford G. Wlodaver, MD,
Associate Editor
Susan F. Records,
Director of Publications

Addendum to the Report of the *Journal of the Oklahoma State Medical Association*
Subject: Reappointment of Editors and Approval of Stipends
Presented by: Susan Records, Director of Publications
Referred to: Reference Committee II

Appointment of Editors:
In accordance with OSMA bylaws, the *Journal's* three Editors serve rotating 3-year terms and one must be appointed/reappointed each year by the Board of Trustees. In addition, the *Journal's* Associate Editors must be appointed/reappointed to their positions each year.

Eligible for reappointment to a 3-year term as an Editor:

Ray V. McIntyre, MD

Eligible for reappointment to 1-year terms as Associate Editors:

Ruth H. Oneson, MD
J. Michael Pontious, MD
David M. Selby, MD
Clifford G. Wlodaver, MD

Nominated by Editor-in-Chief Ray V.

McIntyre, MD, for appointment to a 1-year term as Associate Editor:

J. Michael McGee, MD

Budget Request:

Last year the Board of Trustees approved honorariums of $200 each for the 6 editors who assisted Editor-in-Chief Ray McIntyre. The Board is asked to approve these stipends again this year.

Respectfully submitted,
Susan Records, Director of Publications

REPORT OF THE MEDICAL STUDENT SECTION

Reference Committee II (A-96)
Subject: Annual Report
Presented by: Kathleen A. Musson
Referred to: Reference Committee II

Introduction:

The OSMA Medical Student Section consists of approximately 300 members from the OU College of Medicine at the Health Sciences Center and the OU College of Medicine-Tulsa. The OSMA Medical Student Section is the largest extracurricular group on the Oklahoma City campus. The purpose of the Section is to introduce students to organized medicine and the issues that affect the practice of medicine.

Review of Activities:

The Section continues to sponsor a welcoming picnic for freshman medical students. This year's event at the Oklahoma City Zoo was attended by over 300 students, faculty and guests.

The Section continues to sponsor a series of highly popular Roundtable Luncheons where a group of freshmen students discuss pertinent legal, ethical, and regulatory aspects of medicine with a practicing physician.

The Section also sponsors an AIDS Speakers Bureau. Medical student members also speak to high school and college groups about careers in medicine.

OSMA medical student members attend council, committee, board and House of Delegate meetings.

Oklahoma medical students from both campuses continue to represent our state well at national meetings of the American Medical Association Medical Student Section.

This fall the OSMA Medical Student Section will host a regional meeting for Section 3 of the American Medical Association's Medical Student Section, consisting of AMA Medical student representatives from Arkansas, Kansas, Louisiana, Missouri, Oklahoma and Texas. The theme of the meeting will be "Future of Medical Education."

Budget Request: $10,000

Respectfully submitted,
Kathleen A. Musson
Acting Executive Director, OSMA

REPORT OF THE ORGANIZED MEDICAL STAFF SECTION

Reference Committee II (A-97)
Subject: Annual report
Presented by: William O. Coleman, MD, Chair
Referred to: Reference Committee II

Introduction:

The purpose of the Organized Medical Staff Section is to provide a means to address the relationship between members of the OSMA and organized medical staffs throughout Oklahoma. The OSMA-OMSS maintains communication, develops policy recommendations, and establishes and maintains relations with federal and state government entities having statutory or regulatory jurisdiction affecting organized medical staffs. The Section communicates the activities of the Section to the AMA-OMSS, as well as, to the Board of Trustees and House of Delegates.

Review of Activities:

Throughout 1996-1997, Dr. William Coleman continued to attend AMA-OMSS Chairman Meetings, as well as, carried the views of the OSMA-OMSS to the annual and interim meetings of the AMA.

A meeting of the OSMA-OMSS was held on Sunday, April 6, 1997. Business to come before the committee included the following:

- Michael Schwartz, MD, was elected as the Organized Medical Staff Section Delegate to the OSMA Annual Meeting.
- William O. Coleman, MD, will continue as Chairman of the OMSS; Clarence Robison, MD, will serve as Vice-Chairman; and Kenneth A. Muckala, MD, will serve as Secretary-Treasurer.
- The committee reviewed the California Medical Association Knox-Keene Health Plan which provides information on various for-profit and not-for-profit health plans in the state of California. The committee feels information should be provided on the HMOs with the state of Oklahoma; and, as a result, has submitted a late resolution (Resolution # 24) which will be considered by the Board of Trustees at their meeting on April 24, 1997.
- Dr. Bill Monnig, representing the Governing Council of the AMA-OMSS, attended the OSMA-OMSS meeting on April 6, 1997, and updated the Section on various items being considered by the AMA-OMSS at this time, including: a revision of their mission statement; consideration for a name change; and a recommendation to open membership to all physician members. He also expressed that the Governing Council of the AMA-OMSS felt they must become a more pro-active group to lead the Section and be more visible, as well as an advocate, for practicing physicians. Other plans include a modification in the assembly meetings and the annual meetings to increase their value to participating physicians, with a focus on educational sessions and networking opportunities. Dr. Monnig expressed that it is the AMA-OMSS's desire to create a better link between the AMA and the State OMSS's, as well as improving efforts to work with the Young Physician's Section.

Conclusion:

The OSMA-OMSS continues to expand

Organized Medical Staff *(cont.)*

its membership as concerns and issues of the day are debated. Your OMSS continues to participate at the national level as more and more Oklahoma organized medical staffs are sending delegates to both the AMA and OSMA Section meetings.

The Organized Medical Staff will hold a breakfast meeting Friday, April 25th, at 7:30 a.m. in the Magnolia Room on the second floor of the Tulas Southern Hills Marriott. All Section members are encourage to attend.

Budget: $1,000

Respectfully submitted,
William O. Coleman, MD, Chairman
Joel Anderson, Jr., MD
Robert Anderson, MD
Amadeo Atendido, MD
Alan Aycock, MD
Roger Bombach, MD
R. Timothy Coussons, MD
Jerome Dilling, Jr., MD
James Dixson, MD
Gilbert Emde, MD
J. Keith Falsarella, MD
Michael Goddard, MD
William Hewitt, MD
George Jay, MD
Jeffrey Jones, MD
Nick Knutson, MD
Gordon Lantz, MD
James Leach, MD
John Leatherman, MD
Ronal Legako, MD
Terry Lewis, MD
Richard Liebendorfer, MD
James Lockhart, Jr., MD
Leo Meece, MD
Robert McCaffree, MD
Joseph Moore, MD
Kenneth Mukala, MD
Ellis Oster, MD
Yale Parkhurst, MD
John Perkins, MD
J. Michael Pontious, MD
Bryce Poolaw, MD
J. Dudley Powers, MD
Michael Schwartz, MD
Norman Sneed, MD
Kathy Musson, OSMA Staff

REPORT OF THE YOUNG PHYSICIANS SECTION

Reference Committee II (A-97)
Subject: Annual Report
Presented by: Rochelle Ablah, MD, Chair
Referred to: Reference Committee II

Introduction:
In 1986, the American Medical Association created the AMA-Young Physicians Section. Similarly, in May 1987, the Oklahoma State Medical Association created the OSMA Young Physicians Section. Since its inception in 1987, the Section continues to grow and has been represented by eleven (11) physicians.

Review of Activities:
The OSMA Young Physicians Section continues to participate in the American Medical Association Young Physicians Section. Following the loss of several Delegates and Alternate Delegates due to the requirement that participants in the Section must be under the age of forty (40), we continue to rebuild the Section and now feel we are on our way to becoming a more organized Section.

The OSMA Young Physicians Section sent both Dr. Ablah and Dr. Lester to the AMA Annual Section Meeting in June 1996 and Dr. Ablah attended the AMA Interim Section Meeting in December 1996. In an effort to attain greater experience and participation, Drs. Ablah and Lester will reverse positions as Delegate and Alternate Delegate at the upcoming AMA Annual Meeting to be held in June 1997.

Conclusion:
We look forward to representing the OSMA Young Physicians Section in the coming year. On behalf of the Section, we would like to urge all physicians in practice who are under the age of forty (40) to join us in making the OSMA Young Physicians Section stronger in the years ahead.

Budget: $2,500

Respectfully submitted,
Rochelle Ablah, MD, Chair, Delegate
Stephen Lester, MD, Alt. Delegate
Gilbert E. Emde, MD
Steven L. Fillmore, MD
Michael D. Hartwig, MD
James P. Hutton, MD
Sylvia Lopez, MD
Mike C. Murphy, MD
Howard A. Shaw, MD
Keith L. Stanley, MD
Tisha Dowe Westmoreland, MD
Kathy Musson, Staff

REFERENCE COMMITTEE III

REPORT OF REFERENCE COMMITTEE III

(A-97)
Presented by: Jan Chleborad, MD, Chair

Mr. Speaker and Members of the House of Delegates:

Reference Committee III gave careful consideration to the several items referred to it and submits the following report:

(1) Report of the Oklahoma Medical Political Action Committee
Recommendation:
Mr. Speaker, your Reference Committee recommends that the Report of the Oklahoma Medical Political Action Committee *not* be adopted. It is recommended that a complete accounting of all donations and expenditures be made for the 1996 legislative year. This report should be made available to the OMPAC membership and presented to the 1998 House of Delegates.

(2) Resolution 2: Treatment of Patients by a Licensed Physician
Recommendation:
Mr. Speaker, your Reference Committee recommends to accept Resolution 2 with the following amendments:

The title of Resolution 2 be changed to read as follows:
Treatment of Patients by a Medical or Osteopathic Physician Licensed by and in the State of Oklahoma.

That line 24 be amended to read:
treatment of patients be carried out only by a medical or osteopathic physician licensed by and in the state of Oklahoma

(3) Resolutions 15, 21, and 25 were considered together
Recommendation:
Mr. Speaker, your Reference Committee recommends that Resolutions 15, 21, and 25 *not* be adopted and recommends that the following substitute resolution be adopted:

[The *Whereases* and other material in this resolution have not been printed here, in accordance with the vote of the House of Delegates to strike this material. The deleted material is available at OSMA headquarters.]

....*Resolved,* that the OSMA meet with the Legislative Oversight Committee to address these serious issues and develop solutions; and be it further

Resolved, that the OSMA *Journal* publish the report of the Ad Hoc Committee; and be it further

Resolved, that OSMA members contact their State Representatives and Senators to inform them of these issues and that any dollars saved from managed care should be reinvested in patient care...; and be it further

Resolved, that the OSMA working in conjunction with the state legislature seek to reorganize the Health Care Authority so as to reintroduce traditional values in medicine and work towards reestablishing the traditional patient-physician relationship; and be it further

Resolved, that the new Health Care Authority allow patient choice of provider, both physician and hospital, and will engender responsibility in the patient; and be it further...

Resolved, that the Oklahoma State Medical Association instruct our American Medical Association delegates to work with other states that have received a waiver from HCFA (Texas, Tennessee, Hawaii, California) for managed medicaid and inform HCFA that the waiver system has not demonstrated its objectives in improving care for patients.

Consent Calendar

Recommended for Adoption:

(4) Report of the Council on Governmental Activities
Mr. Speaker, your Reference Committee recommends that the recommendations of the Council on Governmental Activities be adopted and the remainder of the report be filed for information.

(5) Resolution 4: Advanced Directive (AD) for each Nursing Home Patient
Resolution Adopted

(6) Resolution 5: AMA Delegation Surveying OSMA Membership on Policy and Actions Within the AMA
Resolution Adopted

(7) Resolution 7: Appointment of an Ad Hoc Committee to Consider All Aspects Relating to the Enactment of Tort Reform in Oklahoma
Resolution Adopted

(8) Resolution 20: Home Health Care
Resolution Adopted

(9) Resolution 26: HIV Prevention Act of 1997
Resolution Adopted

Filed for Information:
(10) Report of the Council on State Legislation and Regulation
Report is filed for information.

(11) Report of the Council on Member Services
Report is filed for information

(12) Report of the Council on Medical Education
Report is filed for information

(13) Report of the Physicians Recovery Committee
Report is filed for information

(14) Report of the Commission on International Medical Graduates
Report is filed for information

(15) Report of the Oklahoma Foundation for Medical Quality
Report is filed for information

Mister Speaker, your Reference Committee recommends adoption of the

Reference Committee III *(continued)*

Report of Reference Committee III as a whole.

Mister Speaker, this concludes the Report of Reference Committee III. Your Reference Committee wishes to thank all who participated in the hearing and contributed to the preparation of this report. As Chairman, I would like to thank the other Reference Committee members and OSMA staff, Vickie White Rankin and Judy Lake.

Respectfully submitted,
Jan Chleborad, MD, Chair, Woodward
J. Ross Vanhooser, MD, Tulsa
Tim Robison, MD, Muskogee
Tim Hepner, MD, Tulsa
Robin Smart, MSIII

REPORT OF THE COUNCIL ON GOVERNMENTAL ACTIVITIES

Reference Committee III (A-97)
Subject: Annual Report
Presented by: Richard J. Boatsman, MD, Chair
Referred to: Reference Committee III

Introduction:
The Council shall review federal legislation and regulation of concern to the medical profession or the public health, and shall initiate activities or undertake appropriate responses on matters of priority interest. It shall also establish and maintain relations with federal government entities having statutory or regulatory jurisdiction affecting the medical profession, the delivery of health care, or the public health. In cooperation with other Association Councils and Committees, it shall develop policy recommendations for consideration by the Board of Trustees and it shall prepare testimony and otherwise conduct the federal legislative program of the Association.

Review of Activities:
As the 105th Congress prepared to begin, the Council on Governmental Activities met to discuss priority issues that we hoped would be addressed by the U.S. Congress. The following list addresses our priority concerns:

(1) Medicare. The President's Medicare Reform Package released January 21, 1997, contains both positive and negative features. Among features that we liked were PSNs, rural Health Care Initiatives, and emphasis on preventive health care. Among the negative features were additional provider cuts.

Additionally, the shifting of a portion of home health care visits from part A to part B, while providing pressure relief on the part A trust, otherwise accomplished no savings. The part A trust will spend its last dollar in 2001. We feel sure that Congress will not let Medicare collapse. The long-term solutions require a restructuring, rather than simply further reducing payment to providers, a mechanism which has already depleted virtually all the fat out of the system.

An important central feature should be utilizing a portion of the premium to purchase catastrophic health insurance through the private sector. A number of variations on this theme are possible, including medical savings accounts, or patterning the system on the Federal Employees Health Benefits Program. Some concessions from the Medicare population, such as means testing and increasing the eligibility age from 65 to 67, may be possible, but will be unpopular. We feel this year, with the rhetoric of the presidential election behind us, but before next year's elections, provides a prime window of opportunity for Medicare reform. It would be best dealt with as part of the budget reconciliation process, rather than as one or more free standing bills.

(2) The Stark II proposed rule should be reviewed before April, to insure a common sense approach.

(3) A patient advocacy package is extremely important. The Medicare Patient Choice and Access Act of 1997(H.R. 66) is a good bill and should be considered either as a free standing package and/or as a pattern for Medicare language.

(4) Medicaid. While there is less urgent pressure for reform, we are concerned about the siphoning off of Medicaid funds for non-health care uses and other trends. The legislation mentioned in the above paragraph may prove helpful in this area.

(5) A ban on drive-through mastectomies. At least 48 to 72 hours are needed.

(6) Extended insurance reforms, especially geared toward expanding coverage for children. About three million uninsured children are eligible for Medicaid, but are not participating. There are a number of different approaches in the wings, including those of Daschie (tax credits) or Kerry-Kennedy (federal grants to states to contract with private health insurers), as well as other approaches. All will deserve study.

(7) Tort reform. We feel this would be doomed to veto as a free standing bill, but perhaps M.I.C.R.A. style language could be incorporated as part of the Medicare reform package. This has been repeatedly stripped out of previous House legislation by the Senate, but we feel another effort is warranted. There may be forthcoming evidence from the American Academy of Actuaries demonstrating the cost savings benefits, which might provide the additional evidence to carry the day. We feel about 57 votes are present in the Senate, and this might allow us to have the needed three more. Since the President does not have to worry about being reelected, he may sign a reasonable malpractice reform bill. The language framework could come from the previous H.R. 958, or from McConnell's bill from last June (81861), which might offer alternative approaches.

(8) Antitrust relief. The language could be patterned on last year's H.R. 2925. This would be of great benefit to Oklahoma as we have previously discussed.

(9) Clinical Laboratory Improvement Act. This might include many of the reforms proposed in H.R. 1386.

We sent letters to our entire congressional delegation detailing each one of these concerns, and followed the letters with a trip to Washington on March 10, 1997. While there, we met with our congressional delegation and our contract lobbyist, John Montgomery.

After returning from Washington, I believe that this will be a relatively quiet year for health care legislation. Of the

nine items listed above, I believe only a couple of concerns will actually be resolved by this congress. There is guarded optimism of the future of Tom Coburn's Patient Advocacy Bill (HR 66) and the ban on drive through masectomies. It would apppear that we can win the approval of the U.S. House for HR 66, and we are hoping for sufficient sponsors on the Senate side to be successful there. The intense opposition of large insurance companies with significant managed care business is anticipated.

With regard to Medicare, there appears to be little sentiment in favor of needed structural changes. It appears that the only significant change in the immediate future will be a ratcheting door on provider payments. Of President Clinton's proposed spending reduction of 100 billion dollars over 5 years, nearly 7 billion would come from physician payments.

The tort reform issue also seems to have withered away this year. It appears that at the current time, there is little hope for significant reform.

The Council will continue to work closely with the Oklahoma Congressional delegation on issues of importance to physicians and their patients. The OSMA will continue to express support for positive reform of Medicaid, tort reform, extended insurance reforms, antitrust relief and the Clinical Laboratory Improvement Act, among others.

OSMA has a tremendous relationship with the members or the Oklahoma Congressional delegation. We have access to all members of our delegation and individual physician relationships with our U.S. Senators and U.S. Representatives are extensive. John Montgomery our Washington representative has been very helpful to our efforts. As a result of these positive relationships, our delegation is very supportive of OSMA's position on health care issues.

Another ingredient in the successful federal strategy is the regular presence of OSMA members in Washington. The OSMA President visits Congress personally at least once a year and on an as-needed basis. The OSMA is also well represented at the AMA National Leadership Conference which includes Capitol Hill visits.

Recommendations:

(1) All OSMA members should contribute to the Oklahoma Medical Political Action Committee (OMPAC) and the American Medical Political Action Committee (AMPAC). They should also encourage their colleagues to join.

(2) Physicians interested in federal legislation and regulatory activity should advise the President of the OSMA of their interest in the activities of the Council.

(3) County and specialty societies are encouraged to send a representative to the AMA's National Leadership Conference.

(4) Physicians should become involved in the grassroots efforts to get to know their congressmen personally and to call on them when critical issues arise in Congress.

Budget Request: $35,000

Respectfully submitted,
Richard J. Boatsman, MD, Chair
Jack J. Beller, MD
Edward Brandt, Jr., MD
Sara R. DePersio, MD
C. Wallace Hooser, MD
Perry A. Lambird, MD
Victor L. Robards, Jr., MD
James Rhymer, MD
Ms. Sherry Strebel
Roland A. Walters, MD
Kenneth Whittington, MD

REPORT OF THE COUNCIL ON STATE LEGISLATION AND REGULATION

Reference Committee III (A-97)
Subject: Annual Report
Presented by:
Edward N. Brandt, Jr., MD
Referred to: Reference Committee III

Introduction:

In the 1997 legislative session, 2,084 bills were introduced, setting another new record for volume. The OSMA had one of its most ambitious legislative agendas ever, introducing 6 of its own ambitious bills, while supporting, monitoring or opposing hundreds of others.

During the same time period, the Council on State Legislation and Regulation has been involved in monitoring the activity of state boards as they have considered rules that directly or indirectly impact upon the practice of medicine.

The Council on State Legislation and Regulation has met on a bi-weekly basis since January 7, 1997, and will continue to meet as needed up until Sine Die on May 29th.

OSMA's 1997 Legislative Agenda: For the first time, the Council on State Legislation and Regulation developed legislative goals that reflect the OSMA's legislative policy and priorities. These legislative goals, along with our 1997 Legislative Agenda were submitted to OSMA's Board of Trustees for approval on January 12, 1997. Both the goals and the legislative agenda were approved unanimously.

OSMA's Legislative Goals read as follows:

Goal 1: Insurance and Regulation Issues

Promote legislation that will protect and enhance patient access to appropriate quality care provided by medical and osteopathic physicians without the negative interference of insurance companies and regulatory entities.

Objective: Prevent any delay or denial of medically necessary patient diagnostic and treatment options while protecting the autonomy of the physician in medical decision making.

For Example:

1. Advocate legislation that will implement effective physician and patient friendly approaches to the implementation of managed care.
2. Promote the principles of the OSMA Fairness in Managed Care Act.
3. Seek methods for appropriately regulating the quality of care delivered by Managed Care Organizations (MCOs).
4. Introduce and support legislation to close loopholes in the drive through

delivery bill.

5. Promote legislative and regulatory protection for fair, reasonable, and appropriate medical fees.

6. Monitor the implementations of Sooner Care and address problems arising therefrom.

Goal 2: General Health Issues
Promote legislation that will enhance the health and well-being of the public.

Objective: Encourage the prevention of health problems, promote healthy lifestyles, early intervention and appropriate treatment.

For Example:

1. Support public policy encouraging a widespread immunization program to protect Oklahoma's children and youth and other vulnerable populations from any illnesses preventable by immunizations.

2. Support public policy and legislation curbing tobacco use.

a. Allow local communities to pass their own regulations on tobacco use and sales tougher that current state law.

b. Promote legislation providing for penalties for owners of any company selling tobacco products to minors.

c. Advocate legislation which appropriately restricts tobacco advertising, especially advertising targeted to young people.

3. Support legislation aimed at the control of prevention of violence, especially family violence, in Oklahoma.

4. Seek adequate funding for the Poison Control Center.

5. Seek new funding options that will help establish a statewide trauma system, including a Level I Trauma Center as passed by the OSMA House of Delegates.

6. Support legislation and regulations which would prohibit the sale of nonhuman primates to private citizens as passed by the OSMA House of Delegates.

7. Support public policy that would improve access to medical and public health services for all Oklahomans.

Goal 3: Scope of Practice
To provide the maximum protection of patient's health by assuring the best quality of care.

Objective: Preserve and protect the autonomy of all medical and osteopathic physicians in providing the highest quality of patient care and protect the public from health care providers that are less qualified.

Goal 4: Tort Reform
Promote legislation that will provide fairness and efficiency at all levels (District, Appellate, and Supreme Court) of the civil justice system, especially in the professional and product liability arena.

Objective: Preclude attempts to put the defendant physician(s) at a direct or indirect disadvantage in the medical malpractice lawsuit. To obviate professional liability tort laws that coerce the physician into pretrial settlement.

For Example:

1. At the end of the three year (1999 legislative session), executive and legislative moratorium on tort reform actions support or introduce legislation to implement comprehensive professional liability reform.

Goal 5: Workers Compensation
Review and monitor workers compensation legislation to determine the impact on physicians who render medical services in the workers compensation environment.

Objective: Prevent any change of the workers compensation laws that adversely affect the way medical or osteopathic physicians deliver care to an injured worker and support such changes that improve such care.

OSMA'S 1997 Legislative Program:

OSMA's 1997 Legislative Agenda (Priority Bills) Includes the Following:

HB 1598, Drive-Through Delivery: Russ Roach of the House and Ben Brown of the Senate. This bill will close loopholes in the 1996 law which continued to allow insurance companies to deny adequate coverage for hospital stays originally intended by the authors of HB 2348 last year. This bill has passed both houses. Senate amendments have been accepted by the House, and the bill as been transmitted to the Governor.

HB 1532, Breast Cancer Protection Act: Debbie Blackburn of the House and Trish Weedn of the Senate. A health plan that provides medical and surgical coverage related to the treatment of breast cancer and other breast conditions shall ensure that coverage is provided for not less than 48 hours of inpatient care following a mastectomy and not less than 24 hours following a lymph node dissection. This bill also includes requirements for coverage of reconstructive surgery of the affected breast as well as the contralateral breast when necessary to establish symmetry, etc. Has passed the House and Senate committee. This bill was signed by the Governor on April 22, 1997.

HB 1360, State Trauma System Development: Laura Boyd of the House and Brad Henry of the Senate. This bill provides for voluntary participation by hospitals in the development of a Trauma Center identification program by the Oklahoma State Department of Health. This bill has passed both houses and is now in conference committee.

SB 277, Immunizations: Bernest Cain of the Senate and Jari Askins of the House. This bill amends the Oklahoma Insurance Code to provide that a Health Benefits Plan offered by an insurance company, group hospital service corporation, health maintenance organization, the Oklahoma Employees Group Insurance Program and the Oklahoma Medicaid program that provide benefits for a family member of the insured shall provide coverage for immunizations for each child from birth through the age of eighteen years without subjecting the immunization coverage to a co-pay or deductible. This bill was the first of OSMA's 1997 bills to become law. It was signed by the Governor on April 9, 1997.

HB 1416, Fairness in Managed Care Act: Betty Boyd of the House and Brad Henry of the Senate. This bill encompasses major reform provisions to protect both doctors and patients involved in managed care plans. Key provisions of the bill include adequate and understandable explanations for enroll-

ees regarding what is and is not covered by the plan, improved definitions of urgent care and emergency care to adequately cover the need for treatment in urgent and emergency situations out of area, as well as a gag clause provision prohibiting insurers from preventing communications regarding the treatment options, etc. between physician and patient. In addition, the bill provides that any insurer must give physicians who have been terminated from the plan the reasons, when requested, for termination of the contract. The bill, as introduced, also contains language requiring that employers who offer only an HMO must also offer a point-of-service option to enrollees, and that the increased cost of such an option may be borne by the enrollee rather than burdening the employer. This bill passed the Senate on April 10, 1997, without a single dissenting vote. It previously passed the House 98-0. It will now go to the conference committee to work out details.

HB 2012, Informed Consent: Jari Askins of the House. Allows the next of kin to approve experimental treatment for a patient when the patient is incapacitated, without going through the lengthy and costly legal process to establish legal guardianship through the courts was signed into law by the Governor on April 16, 1997.

Never has OSMA's legislative program been as successful to this point in the legislative process as it has this year. Every single one of the bills we introduced is still alive, having survived each step of the legislative process with strong votes of support at each step. This is due in large measure to increased physician participation at the grassroots level, larger OMPAC contributions to candidates that are based on their support of OSMA's legislative program rather than party or leadership position, and an intense direct lobbying effort at the State Capitol.

In addition to success of the OSMA initiated bills, our lobbyists have been able to kill most of the legislation that we have been opposed to. The list of bills that we are monitoring, opposing, or supporting and their recent status is included at the end of this report.

State Regulation Issues

The Council has been involved in monitoring activity by State rule-making boards and commissions that affect the practice of medicine. Recent actions by two such boards should be of interest to OSMA members.

The Oklahoma State Board of Pharmacy met in late March to consider proposed rules changes that enable pharmacists to establish drug therapy protocols in collaborative agreements with prescribing practitioners. The Oklahoma State Medical Association and the Oklahoma Osteopathic Association provided testimony in opposition to the rules changes and initiated a targeted letter-writing campaign to the Board to oppose the new rules changes and the potential harm that they could cause the public. Despite our opposition, the Pharmacy Board approved the new rules. These rules may now proceed to the legislature where a resolution will be introduced to disapprove the rules. We will work to reject the new rules through the legislature and the Governor. Once the rules have been transmitted to the Legislature, our elected officials will have 30 legislative days to accept or reject the rules. If the legislature fails to act within the allotted time and the Governor signs the rules, as passed by the Pharmacy Board, they will have the full force and effect of the law. OSMA will be working to prevent such an occurrence.

Other concerns that the Legislative Council has with the rules include the following:

"Drug Therapy Management" in the rules means "the review and evaluation of a patient's drug therapy regimen by a pharmacist." "Drug therapy management includes the collaborative authority to:

(A) initiate, modify and manage drug therapy;

(B) collect and review patient drug histories;

(C) measure and review routine patient vital signs including pulse, temperature, blood pressure and respiration, and

(D) order, perform and evaluate the results of laboratory tests relating to drug therapy when performed in accordance with protocols."

Another key provision offered in the new rules is a definition of "Pharmaceutical care" that means "pharmacist-directed patient care management through which pharmacists provide an expanded level of patient care that focuses on disease prevention and wellness and includes dispensing and administering, monitoring and evaluating, counseling, intervening and managing drug therapies to enhance patient care and improve health outcomes."

These rules fail to differentiate between levels of pharmacy education in determining which pharmacists will be allowed to participate. This is clearly a major scope of practice issue and a threat to public health that the OSMA will continue to oppose.

The State Board of Health met in March to address regulation of Health Maintenance Organizations. They were considering, among other items, a prohibition of gag clauses in HMO contracts with physicians. The OSMA supports such a rule change, but welcomes the Board's decision to postpone consideration of the new rules pending the outcomes of HB 1416 and SB 642, the managed care bills currently proceeding through the legislative process.

Grassroots Development Program: Every effort is being made to improve the grassroots-level participation by physicians and alliance members in various aspects of the legislative process.

Since our new legislative staff were hired last July, they have spoken to specialty societies, county societies, and alliance groups around the State, informing them of legislative issues and encouraging their participation in various facets of the legislative process. As a result, we are experiencing an increase in active MD support of our legislative program.

County and speciality societies have been encouraged to hold legislative receptions, dinners, coffees, meetings, and activities to allow for more interaction between MDs and legislators. Stephens County, Comanche County, Tulsa County, and many others have held such legislative activities this year. Norman physicians instituted a legislative contact program on Friday mornings at their

State Legislation *(continued)*

hospital. Coffees and desserts are being held involving Oklahoma County legislators, and new efforts are being made by our members across the state.

The grassroots network is being dramatically expanded to include larger numbers of physicians from a variety of subspecialties as well as alliance members. The "grassroots contacts" are available to be mobilized to visit with legislators on critical issues when the need arises.

In addition, a "key contact" program involving physicians in the communities of "key" legislators that serve on committees handling most of our legislation or in legislative leadership roles has been developed and is working well. Physicians from around the State have been meeting with these "key legislators" and the effect on our legislative program is clearly positive.

Doctor-of-the-Day Program: The "Doctor of the Day" program has been expanded to include greater legislator contact by the MDs. Our legislative staff has provided information regarding current legislative issues to our Doctors of the Day and have involved them in our lobbying efforts where their activities can be timely and appropriate. This increased physician-legislator contact is proving beneficial to our legislative effort.

Legislative Communications: Legislative updates are provided on a regular basis in the *Week in Review* and in the *OSMA News*. Statewide mailings are done periodically when time allows for such mailings to be read by the membership prior to key votes. Targeted legislative alerts are faxed or mailed to members who are needed to impact the legislative process at key points. Telephone contacts in urgent situations are frequently utilized to spur critical physician-legislator communications. Many OSMA members have participated by appearing to testify at legislative committee meetings and before state boards and commissions. The results of these contacts appear to be very positive. We have heard from legislators who are being contacted by physicians and they are pleased.

Conclusion and Recommendations
Our legislative program is experiencing unprecedented success. Major reform measurers such as our Fairness in Managed Care bill have never before been heard, much less moved this far in the legislative process, until now. Every bill we introduced remains alive and is that much closer to becoming law. We recommend that we continue to build up the strong grassroots efforts that have been developed in the last several months, that we work closely with the Oklahoma Medical Political Action Committee in assessing candidates' support for OSMA's legislative agenda, and that we continue to have at least two lobbyists at the State Capitol to keep our legislative program moving. We encourage all OSMA members to become involved in the legislative process by participating in at least one of our grassroots programs and contributing to candidates individually and through the political action committee.

In closing, let me commend Vickie Rankin and Lynne White for their superior lobbying efforts and the members of the Council for their hard work.

Budget Request: $92,500

Respectfully submitted,
Edward N. Brandt, Jr., MD, Chair
Craig Abbott, MD
John Alexander, MD
Richard Baltaro, MD
Jack Beller, MD
Richard Boatsman, MD
William Coleman, MD
Hugh Conner, Jr, MD
Steve Crawford, MD
M. Joe Crosthwait, MD
Sara DePersio, MD
S.A. Dean Drooby, MD
Scott Dunitz, MD
Warren Filley, MD
Jay Gregory, MD
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Barbara Jett, OSMAA
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Robert Mahaffey, MD
Gary Massad, MD
Paul Patton, TCMS
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Jeffrey Shaver, MD
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Gary Strebel, MD
Sherry Strebel, OSMAA
Lanny Trotter, MD
J. Ross Vanhooser, MD
Kenneth Vermette, MD
Joan Walker, MD

REPORT OF THE COUNCIL ON MEMBER SERVICES

Reference Committee III (A-97)
Subject: Annual Report
Presented by: William Bernhardt, MD, Chair
Referred to: Reference Committee III

Introduction:
The various programs of the Member Services Council are designed to encourage participation and membership in the Oklahoma State Medical Association. The products and services offered should provide quality and value to the association members and when possible, provide a source of non-dues revenue to the association at no expense or detriment to the membership. Various endorsements also provide advertisement in our *Journal* and exhibit fees at the state meeting.

Review of Activities:
The following is a summary of the OSMA endorsed plans and activities with *membership, participation, income derived,* and *scope of benefits:*

Administration Management Services Organization (AMSO)—In August of 1996, the council developed AMSO to provide administrative services on a contract basis for any medical specialty society or special interest group. The size of membership of many of these groups will not financially support full time administrative staff. AMSO can provide basic clerical support services at a fraction of what it would cost to hire full time staff. Most of the prospective groups have been contacted about this service. AMSO

currently has one (1) group under contract. This service has earned a net profit of approximately $300.00 since August of 1996. If you would like information or have questions, contact Toni Farrar at the OSMA offices.

AutoFlex Leasing—AutoFlex Leasing is a company located in Dallas, Texas, and is endorsed by several state medical associations. It offers very competitive prices and services to physicians that lease or purchase automobiles. They will arrange to pick up and deliver anywhere in the state of Oklahoma for OSMA members and have a number of additional related services available. OSMA members may call them at 1-800-634-1234. OSMA received $600.00 in non-dues revenue from AutoFlex in 1996.

Insurance plans—offered through the association with insurance agency, C. L. Frates & Company, under a royalty agreement (approximately $6,000 per year). The insurance programs have seen some decline as hospitals and managed care organizations are employing physician members and offering them similar benefits. The council will continue to monitor this trend. For information on any OSMA insurance program, call 1-800-522-9219.

The breakdown of the types of insurance policies issued to date is as follows:

Insurance	Policies Added in 1996	Total Policies to Date
Overhead	13	127
Disability Income	7	241
Group Term Life	11	211
Hospital Indemnity	6	63
Accidental Death	10	88
High Limit Term Life	6	36

Business Overhead Expense—Business Overhead Expense Insurance provides dollars to reimburse actual office expenses incurred and paid during a disability.

A disability is considered to be the inability of an individual, due to either accident or sickness, to accomplish the substantial and material duties of his or her regular occupation.

The policy is considered a cost of doing business and its premiums are tax deductible. The benefits are received as income and are taxable. Benefits may be purchased from $500 a month to $10,000 a month. Benefits are payable for 24 months. Two waiting periods are available: 15 days and 30 days.

Disability Income Insurance—The disability insurance market is still going through market changes as claims cost exceed premiums. This has resulted in many of the disability insurance company policy provisions relative to job definition being too liberal, and the claims increased dramatically. To date, OSMA has never experienced a rate increase on this product, however, notification has been given to all OSMA insureds that a rate increase will take place on their renewal date.

The OSMA-sponsored Disability Income Insurance program offers a monthly benefit of $10,000 per month. The policy provides coverage in the physician's occupation or recognized specialty for up to age 65, as a result of a disabling accident or sickness. Other features of the policy include a renewal guarantee to age 70, waiver of premium and survivors benefit. Optional coverage include:

- Residual Benefit (Partial Disability)
- Cost of Living Adjustment Benefit
- Guaranteed Purchase Option
- Recovery Benefit
- Hospital Indemnity
- Accidental Death and Dismemberment

Policy Benefits available are:

- 5 years Accident and 2 years Sickness
- Lifetime Accident and 7 years Sickness
- Lifetime Accident and age 65 Sickness
- Age 65 Accident and Sickness

Group Term Life Insurance—The OSMA Group Term Life program offers coverage from $25,000 to $500,000 for the physician and his spouse, and from $25,000 to $100,000 for the employee of a physician. The Accidental Death benefit is available up to $100,000 under the Group Term Life program. The Accidental Death and Dismemberment benefit cannot exceed the total life benefit. For example, if a person were to obtain a $50,000 life policy they would be eligible for up to $50,000 of AD&D. The policy includes waiver of premium benefit. This policy coverage was recently transferred from Commercial Life Company to Northwestern National Life Insurance Company.

Hospital Indemnity—The Hospital Indemnity policy pays a specified amount per day that an insured is a patient in a hospital. This program will: 1) pay up to 500 days benefit from $50.00 to $200.00 per day; 2) pays twice the selected benefit for Intensive Care prior to age 65 for period of 30 days; 3) has a lump sum benefit of $500 if confined over 7 days (can be increased to either $1,000 or $2,000); and 4) pays 50% of selected benefit for skilled nursing home care after a prior hospital confinement for same length of time as the hospital stay.

Coverage can include the member, his spouse and family. The policy does not coordinate with any other health insurance you may have, i.e., the money comes directly to you for each day of hospitalization. You could use it to pay a yardman, a housekeeper, babysitter, or to meet your deductible and coinsurance responsibilities under your group health plan. The policy is not underwritten (no health questions). However, it provides no benefit for the first 12 months of the policy for any health problems treated within 12 months of the policy's effective date.

Although this product has not enamored itself with the Association, it has taken on new possibilities with the implementation of the PLICO Health inpatient deductible.

For a nominal cost, this program can be used to fund this deductible, as well as other expenses associated with a hospitalization.

Accidental Death and Dismemberment—This program provides benefits from $50,000 to $250,000 for accidental loss of life and a portion thereof for accidental loss of limb, eyesight, speech or hearing.

It provides 24 hour protection wherever you go.

Member Services *(continued)*

High Limit Term Life—The OSMA sponsored high limit term life program provides ten and fifteen year level premium for coverage amounts up to $10,000,000. The minimum coverage available is what $480 annually will purchase or $100,000, which ever is less. Full underwriting is required with each application. Plan features include:

1. Conversion option through age 64 or for the first six years from policy date.
2. Benefit Advance Endorsement will provide up to 25% of the death benefit (maximum $50,000) if the insured is diagnosed with a terminal illness.
3. Wellness Screening provides a personal, confidential wellness assessment for each insured. The data is prepared from the medical examination requirements.
4. Discounted premiums are available to all preferred issued members of the OSMA.

The underwriting company is North American Company for Life and Health Insurance which is rated A Excellent by A. M. Best.

In November 1992, Lyle Kelsey, CAE, became licensed as an independent insurance agent. Through Member Services, he serves as Agent of Record for 957 MDs insured with PLICO. Mr. Kelsey provides full policy service to medical doctors who list him as their agent. The 5% commission normally paid to agents is waived and the commission remains in PLICO reserves. The financial savings to PLICO and OSMA physicians is as follows:

Year	# of MDs	Premium	Commission
1993	453	$2,358,852	$117,943
1994	551	$3,088,234	$154,411
1995	637	$5,048,699	$252,435
1996	816	$6,541,121	$327,056
1997 (as of Mar.)	957	$8,778,752	$438,937
Accumulated savings to date			**$1,290,782**

Harrison and Associates—In 1992, the council entered into an agreement with Harrison Associates of Norman, to offer management consultant services to members of OSMA. Harrison Associates provides initial consultations to OSMA members at no charge. If the member needs additional services, Harrison Associates will make an on-site conference visit to discuss the consulting services available and financial obligations at that time. We encourage you to contact Harrison Associates and indicate that you are an OSMA member if you have any needs within your practice ranging from new practice set-up, computerization of the office, insurance filing, cash flow, physician recruiting, tax and financial planning, accounting systems, etc.

I.C. Systems Collection Services—This national organization has been endorsed by a large number of state medical associations nationwide. OSMA endorsed this company in 1983. I.C. Systems conducts seminars for OSMA members and direct mailing to secure accounts. They provide advertising and annual meeting exhibit space to support the ongoing activities of the OSMA. This service generated $6,534.00 in non-dues revenue in 1996.

Quest International by Destinations—For three years, OSMA Member Services has been offering a program through Destinations called Quest International that allows up to 50% discounts on hotel accommodations and similar discounts on restaurants, rental cars and other travel amenities to club members. Over 200 physicians have signed up for this service with very satisfactory results. The program generated approximately $332.00 in non-dues revenue in 1996. Contact 1-800-782-9450 for further information.

Seminars and Promotional Materials—*Managed Care Seminars*: Two "Making Managed Care Work for You" seminars were held in the last quarter of 1996 in Tulsa and Oklahoma City. A total of 35 participants attended these seminars. Conomikes Associates, Inc., of Los Angeles, California, presented these seminars for the OSMA incurring all costs associated with the production, promotion, and presentation. The total amount of monies collected was $6,705.00. A 10% royalty in the amount of $670.50 came to the OSMA.

Also, 10% royalties were received by the OSMA for several promotional items sent out by Conomikes in 1996.

Promotion	$ Amount	Royalty
January 1, 1996 - June 30, 1996		
Handbooks	$ 5,451.00	$ 545.10
Newsletters	$ 2,530.00	$ 253.00
July 1, 1996 - December 31, 1996		
Tape Seminars	$ 5,040.00	$ 504.00
Handbook	$ 1,264.00	$ 126.40
Collection Handbook	$ 316.00	$ 31.60
Totals	**$14,601.00**	**$1,460.10**

Coding Seminars—Three "Introduction to Coding" seminars were held in November and December of 1996. In Oklahoma City there were 56 people in attendance, in Tulsa there were 44 people in attendance, and in Lawton there were 21 people in attendance. An income of $12,580.00 was received with direct expenses of $5,652.10 and Speaker expense of $3,463.95. A net profit of $3,463.95 was realized by the OSMA for these seminars.

Speed Press Printing Service—Since January 1994, Member Services has offered a special printing service for OSMA members on letterhead, envelopes, and business cards. Several brochures have been mailed to OSMA members offering a package price on printing services. This is an excellent quality and price on printing of all types. Contact OSMA Member Services for further information.

Oklahoma Central Verification Organization (OCVO)—The OSMA Board of Trustees approved an expenditure of $50,000 to partner with the Tulsa County Medical Society to provide the Oklahoma Central Verification Organization (OCVO) statewide. The program is an excellent service for OSMA members in that it centralizes the completion of applications for all the various managed care organizations and hospitals. The council will be involved in the marketing of this service.

Stillwater National Bank Credit Card Program—The OSMA VISA card program has been a strong product

for OSMA members. Stillwater Bank continues to be a strong ally with OSMA in providing all types of financial services to Oklahoma physicians. This credit card program provided $6,749.00 to OSMA in 1996. For information call 1-800-234-5632.

TaxResource Professional Tax Audit Program—TaxResource is an organization that provides representation to physicians in the event of an IRS tax audit. They provide full on-site services, plus newsletters and telephone consultation for a yearly membership of less than $200. (New program 1-96) The OSMA received $1,830.00 in commissions from TaxResource in 1996. For information call 1-800-922-8348.

Travel Programs—INTRAV is offering the following travel programs in 1997: China and the Yangtze River, Mediterranean, Alaska Gold Rush, Canada and New England, Turkish Coast and Greek Isles, Danube to the Black Sea, Grand Waterways of Europe, and the Trans-Panama Canal. All of the trips have several choices of departure dates which are listed in the magazine *Intravler* provided to physicians by INTRAV. You may reach INTRAV by calling 1-800-456-0020.

Also, TRAV-CON is offering the following travel programs in 1997: Alaska, Voyage of the Glaciers; Heart of the British Isles; Mystic Temples & Capitals of Asia, and Panama Canal Cruise. For more information call 1-800-938-8728.

OSMA Pension Program in association with UPAL Pension Plan—Utica Physicians Association, Ltd. (UPAL) is a physician-owned and operated organization founded in 1985. The OSMA Council on Member Services, with UPAL, offers this successful pension program statewide to OSMA member-physicians. This report cannot explain the program in detail, but Mrs. Sandra Wickersham, Director of Financial Services and Pension Administration, can answer all questions about the program. The Program offers the complete range of retirement plan services from plan design to annual government reporting. Program features were designed specifically for physicians. The program has operated for over 10 years, with Oklahoma physicians having invested $104.7 million in the program to date. Administration and record keeping services are provided by Employee Benefits Group, Inc. of Tulsa. Investment manager, search and evaluation services are provided by Asset Consulting Group of St. Louis. Individual top-flight money managers are contracted from around the country and internationally. Participating plans and the seven diversified pooled investment funds are trusteed by The Trust Company of Oklahoma, a $950 million state chartered trust company headquartered in Tulsa. For more information, contact Mrs. Wickersham at 1-800-259-6262 or 1-918-747-5585.

The council met on March 6, 1997, and developed four (4) goals for the short term (1-5 years). These goals have been incorporated in the OSMA Council on Long Range Planning Report for 1997. The goals are as follows:

Immediate–1 Year

(1) Active promotion of the OSMA state-wide credentialing services, the Oklahoma Centralized Verification Organization (OCVO) to all physician members.

Comments: The Council discussed the positive aspects of this member service. The amount of paper work and staff time to fill out applications for hospital credentialing, managed care organization credentialing, licensure and membership in professional organizations is both time consuming and expensive. A centralized credentialing service controlled by medical doctors that would allow a member physician to fill out a standardized form *one* time would be a significant member benefit.

1–3 Years

(2) Medical practice education for young physicians in practice less than 10 years.

Comments: The Council discussed the need for OSMA to be actively involved in offering educational seminars at economical prices to inform young physicians about various aspects of practice management. Examples of topics would be Managed Care, Fee Schedule vs. Capitation, Network Contract Review, Tax & Retirement, and Office Management.

(3) Develop and conduct an aggressive OSMA physician membership recruitment program.

Comments: The Council discussed the need to recruit and maintain membership in the OSMA of new physicians going into practice. This program should involve ways to encourage involvement in OSMA projects and endeavors. Perhaps different types of membership could be considered such as group or institutional membership.

3–5 Years

(4) Research and develop an OSMA physician placement service and central physician registry for locum tenens placement.

Comments: The Council discussed the growing need for an OSMA driven physician placement service for new physicians or physicians wanting to change practice locations. This service would compete with head hunter firms and potentially lower fees and improve service. The service could also direct physician temporary placement for locum tenens.

The council would like to thank Lyle Kelsey for his expert guidance and Toni Farrar for her administrative support in providing the many member service programs. As a licensed insurance agent, Mr. Kelsey has allowed PLICO to retain considerable revenue, which helps reduce liability insurance premiums.

Budget: $2,000

Respectfully submitted,
William Bernhardt, MD, Co-Chair
Tim S. Caldwell, MD
William S. Harrison, MD
Gene L. Muse, MD
James J. Snipes, MD
S. Fulton Tompkins, MD

REPORT OF THE COUNCIL ON MEDICAL EDUCATION

Reference Committee III (A-97)
Subject: Annual Report

Member Education *(continued)*

Presented by: Roger E. Sheldon, MD
Referred to: Reference Committee III

Introduction
The OSMA Council on Medical Education studies and makes recommendations related to all matters of maintaining or improving the level of medical competency in Oklahoma, including but not limited to, maintaining liaison with other emerging health professionals or occupations, and to conducting accredited medical education providers in Oklahoma. The Council also monitors CME standards, as they may be required by Association policy.

Review of Activities
Accreditation Review Committee: Since the 1996 Annual Meeting, the Accreditation Committee has re-accredited Stillwater Medical Center, Stillwater; St. Anthony Hospital, Oklahoma City; Duncan Regional Hospital, Duncan; Hillcrest Hospital, Tulsa; Institute of Mental Health, Oklahoma City; and Jane Phillips Medical Center in Bartlesville. Interim reports were accepted and approved from Deaconess Hospital, Southwest Medical Center and St. Francis Hospital in Tulsa. Thirteen institutions are currently accredited by the OSMA to provide Category I programs.

In a ruling by the Oklahoma Board of Medical Licensure and Supervision on Friday, January 10, 1997, each applicant for re-licensure or reinstatement of licensure shall certify that he/she has completed the requisite hours of continuing medical education (CME). Commencing in the year 2000, the requisite hours of CME shall be one hundred fifty (150) hours in three years, 20 hours each year must be Category 1. This ruling responds fully to the CME resolution adopted by the House of Delegates at the OSMA 1996 Annual Meeting.

An OSMA survey was sent to the membership regarding CME. After reviewing the survey results, the Committee was able to determine which courses would be beneficial for the membership. OSMA will be offering two CME programs at this years Annual Meeting. The law firm of Crowe & Dunlevy will be presenting a program on the physician impact of the Health Insurance Portability and Accountability act of 1996 (HIPAA). Also, Dr. Gordon Deckert will speak on the "State of the State's Health—Where Are We and Where Can We Go?" The Irwin R. Brown Office of Continuing Medical Education designates this CME activity for 3.0 credit hours of Category 1 for the Physicians Recognition Award of the American Medical Association.

OSMA received a $7500.00 grant from the AMA on Physicians Accessing the Internet (PAI). The program will be offered at the 1997 Annual Meeting and will provide physicians interactive access to the Internet. PAI will provide 15 computers which will accommodate 30 participants per workshop. Four hours of CME Category 2 credit will be available.

OSMA will be resurveyed by the Accreditation Council for Continuing Medical Education (ACCME) in September of 1998.

The CME committee would also like to recognize Edward Tomsovic, MD, who passed away in December of 1996. The CME committee appreciated Dr. Tomsovic's service and dedication to improving medical education within the profession and Association. He will be missed by many.

Council on Medical Education Budget Request: $4600.00

Conclusion
The Committee continues to strive to monitor and improve the CME offered to Association members throughout the state.

Respectfully Submitted,
Roger E. Sheldon, MD, Chair
M. DeWayne Andrews, MD
John Nelson, MD
Melissa Clements, MD
Doug Corrie, MD
Antonio DeLeon, MD
William H. Hall, MD
Ward Hardin, MD
Donald Karns, MD
Joseph Moore, MD
B. Bhushan Sharma, MD
Renee B. Willis, MD
John Nettles, MD
Lyle Kelsey, Staff
Barbara Matthews, Staff

REPORT OF THE PHYSICIAN RECOVERY COMMITTEE

Reference Committee III (A-97)
Subject: Annual Report
Presented by: Roger E. Sheldon, MD
Referred to: Reference Committee III

Introduction:
It is the purpose of the Committee to create and maintain an effective statewide noncoercive advocacy program (Physicians Recovery Program—PRP) for identifying, contacting and offering rehabilitative help, ongoing monitoring for licensure and other purposes, for physicians suffering from alcoholism, substance dependence or other addictive disorders. The PRP also serves as a confidential informational, support and referral resource for physicians and other health care professionals and their significant others for other behavioral health issues as well as physical impairments.

Review of Activities:
The OSMA Physician Recovery Program continues to be among the leaders nationally in identifying, assisting in treatment and returning to practice physicians who have suffered from substance abuse/dependency.

As of the end of December, 1996, 562 Oklahoma health care providers are or have been involved with the Physician Recovery Program. Four hundred and twenty-two are back in practice. In addition the program works with a large number of spouses, significant others and other family members. A complete statistical review of the program is part of this report.

An important part of the program continues to be providing documentation of the treatment and recovery status of our physicians (and other health care professionals) for licensing boards, drug registration agencies, insurance

carriers, hospitals and health maintenance organizations.

The program director serves as a representative on the American Society of Addiction Medicine National Physician Health Committee and as a member of the Federation of State Physician Health Programs.

Dr. Darrell Smith, Director since inception of the PRP, announced his retirement effective March 31, 1997. The OSMA Board of Trustees has appointed a committee to study the impaired physician programs of other states prior to designating permanent leadership. Dr. Harold Thiessen has agreed to serve as Interim Director. Dr. William O'Meilia of Tulsa continues to serve as Assistant Director for Eastern Oklahoma. Also significant numbers of volunteer recovering physicians assist in interventions with impaired colleagues and providing support through meetings and networking.

The second annual Oklahoma Physicians in Recovery Retreat was held in October, 1996, and was most successful. Seminars were led by Drs. Douglas Talbott and Dan Angres, both nationally known physicians in the field of Addiction Medicine. Some one hundred persons attended from all sections of the state; and it is planned to continue this annual event.

The PRP has formal relationships with the Oklahoma Osteopathic Association, the Oklahoma Dental Association, and the Oklahoma Veterinarian Association. We work informally with other health care professionals such as physicians assistants, psychologists as well as with medical and dental students.

The breakdown of various types of disorders addressed for the period ending December, 1996 is as follows: Addictive disorder (primary)-33; psychiatric disorder-3; sexual boundary violations involving patients-2. The PRP will continue to serve assisting and advocating for those physicians suffering from these disorders.

Respectfully submitted,
Dr. Harold Thiessen

Oklahoma State Medical Association Physicians Recovery Program Activities Summary

September 1983 Through December 1996

MD/DO Physicians	Total to Date PRP Contact	Currently Practicing in OK
Family Medicine	159	153
Surgery (Inclusive)	53	46
Internal Medicine	66	62
Anesthesiology	28	24
Pediatrics	25	25
Obstetrics & Gynecology	22	20
Psychiatry	25	19
Emergency Medicine	24	9
Radiology	18	18
Ophthalmology	7	5
Pathology	5	3
Occupational Medicine & Other	6	7
Medical Students	18	7
Total MD/DO	**456**	**398***
*(330 MD & 68 DO)		
DDS	35	10
DVM	22	8
Other:		
Physician Assistants	17	4
Psychologists	9	1
Pharmacists	10	0
Podiatrists	4	0
Dental Students	5	1
Other	4	0
Total	**106**	**24**
Total Health Care Professionals		**562**

Physicians MD/DO Relapse
(March 1996 - December 1996)
Re-evaluated = 10
Return to Treatment/New Contract = 10
Pending = 2
Left Medicine/Lost License = 3

Physicians Spouses/Family Members
(March 1996 - December 1996)
Active in PRP Spouse Support Groups = 46
Assistance/Referrals = 3

Comparison of Medical Malpractice Claims (Paid and Reserved) Pre- and Post-Treatment of Chemically Dependent Physicians in Oklahoma 1980 Through 1995

	Identified Physicians W/Claims	Average Claim Payment	Annual Projected Payment
Pre-Treatment	94	$37,382	$973,248
Post-Treatment	94	$5,711	$ 70,012
Projected Est. Ann. Savings		$903,236	

Table 3. Comparison of Dollar Amounts Paid or Reserved for Malpractice Claims Pre-Treatment and Post-Treatment*

	Pre-Treatment		Post-Treatment	
Dollars	No. of Doctors W/Claims	Actual Paid or Reserved (Dollars)	No. of Doctors W/Claims	Actual Paid or Reserved (Dollars)
0-50,000	70	177,868	91	213,881
50,000-100,000	2	156,000	3	174,479
100,001-150,000	5	581,000	0	0
150,001-200,000	2	382,000	0	0
200,001-250,000	1	205,000	0	0
250,001-300,000	3	885,000	0	0
300,001-350,000	1	348,477	0	0
350,001-400,000	3	1,148,868	0	0
410,001-450,000	2	852,746	0	0
450,001-500,000	1	500,000	0	0
500,001-550,000	1	543,500	0	0
Greater than 550,000	3	3,265,500	0	0
Total	**94**	**9,045,959**	**94**	**388,360**

*Data Source: PLICO Insured Index Report dated 15 Mar 1996

REPORT OF THE COMMISSION ON INTERNATIONAL MEDICAL GRADUATES

Reference Committee III (A-97)
Subject: Annual Report
Presented by: Kautilya Mehta, MD, Chair
Referred to: Reference Committee III

Introduction:
The Commission on International Medical Graduates (IMG) was organized as a liaison to the Oklahoma State Medical Association on matters impacting all international medical graduate physicians practicing in Oklahoma.

Review of Activities:
The IMG Commission will continue to direct its efforts towards accomplishing the following goals:

1. Continue the Relationship Between IMG and the Oklahoma State Board of Medical Licensure and Supervision: The commission has had an ongoing project with the Oklahoma State Board of Medical Licensure and Supervision (OSBMLS) to review all IMG applicants for licensure and to help resolve application deficiencies. The project has been very successful and helpful to the commission and the board. The commission has also offered assistance to IMG applicants in securing information crucial to obtaining an Oklahoma license. During 1996, the commission members reviewed 25 applications.

2. Represent OSMA at National IMG Meetings: Several members of the OSMA IMG Commission have represented OSMA at national meetings, i.e., the AMA IMG Advisory Committee and the AMA IMG Caucus. The national forums are an excellent resource for ideas and solutions for problems unique to the IMG population.

3. Promoting Increased Membership in OSMA by IMG Physicians: The OSMA leadership is encouraged to appoint IMG physicians to OSMA councils and committees to take advantage of their background and training in planning the direction of organized medicine in Oklahoma. The IMG Commission will continue its efforts to encourage IMG physicians to join OSMA and become involved in the association process.

4. To Interact with the OSMA President: The IMG will encourage submission of qualified IMG physicians to serve on various governmental boards and agencies that are appointed by the Governor. IMG physicians can bring a unique advantage to these positions in serving the citizens of Oklahoma.

The IMG is appreciative of the opportunity to be of service to the medical profession and the Oklahoma State Medical Association. A special thanks to the members of the IMG Commission and OSMA staff.

Budget: $2,600

Respectfully submitted,
Kautilya Mehta, MD, Chair
Magda Fawzy, MD
Juan Gonzales, MD
R. Murali Krishna, MD
Emmanuel N. Macaraeg, MD
George Pikler, MD
Vadakepat Ramgopal, MD
Avani Sheth, MD
Dorothy Thadani, MD
Carlos Troncoso, MD
T.V. Venkataraman, MD
Annie Venugopal, MD
Imad A. Zantout, MD
Lyle Kelsey, Staff
Toni Farrar, Staff

REPORT OF THE OKLAHOMA MEDICAL POLITICAL ACTION COMMITTEE

Reference Committee III (A-97)
Subject: Annual Report
Presented by:
Jay A. Gregory, MD, Chairman
Referred to: Reference Committee III

Introduction:
The Oklahoma Medical Political Action Committee is a voluntary unincorporated entity comprised of individual physicians and Alliance members interested in supporting political candidates. OMPAC is an independent and autonomous organization managed by its own Board of Directors. The Board of Directors have authority over all policies and activities of the political action committee and serve without compensation. The OMPAC Board conducts the business of the committee and meets periodically to consider the contribution of OMPAC funds to candidates for public office who support OSMA's legislative concerns, per instruction of the OSMA House of Delegates.

Review of Activities:

Current 1997 Membership and Contributions:

New memberships from April 1- April 11, 1997 = 123 members, including 17 in the "200 club," 2 at $250, and 1 at $1000.

Total OMPAC contributions from April 1- April 11, 1997 = $15,050.00

Total AMPAC contributions from April 1- April 11, 1997 = $ 6,000.00

Membership contributions were not listed on OSMA dues notices this year, but went out under separate cover in late March and early April. As a result, PAC contributions are just beginning to come in. The Board has moved to place next year's dues notices back with OSMA dues notices. We plan a number of new activities and efforts to increase OMPAC/AMPAC contributions in the coming months.

Pending Audit Report:
OMPAC's books have never been formally audited. At the April 8, 1997, OMPAC Board meeting, it was agreed that an external auditor will be hired to provide a professional audit.

Contributions of 1996 Campaign:
The 1996 elections were a landmark event for OMPAC. The methodology used to determine which candidates for public office would receive OMPAC support was completely overhauled.

OMPAC based its support for candidates on an objective measure of each candidate's stand on medical issues important to the OSMA, per instructions of the OSMA House of Delegates. A

given candidate's support of the issues important to the OSMA members was measured by voting records for incumbents and questionnaires of non-incumbents.

The new formula for support seemed to work. The Oklahoma Medical Political Action Committee was involved in 65 state legislative races during the recent elections. A phenomenal 60 of the candidates OMPAC supported won their elections.

While no contributions were based upon the political affiliation of candidates, it is interesting to note that OMPAC gave to 44 Democrats (38 percent) and 21 Republicans (34 percent). The combined make-up of both branches of the Oklahoma Legislature is 98 Democrats (66 percent) and 51 Republicans (34 percent). Also noteworthy, is the fact that while there are only 149 seats in the Oklahoma Legislature, only half of the Oklahoma Senate was up for re-election this year and some seats were uncontested. Of the 101 members of the House of Representatives, 23 were elected at filing. Only 78 incumbents in the House had challenges.

OMPAC contributed to the following victorious Senate and House members:

Senate	District	Amount
Ben Brown	SD 43	$600
James Dunlap	SD 29	200
Mike Fair	SD 47	400
Brad Henry	SD 17	900
Maxine Horner	SD 11	1,200
Rick Littlefield	SD 1	900
Ed Long	SD 19	500
Robert Milacek	SD 19	250
Herb Rozell	SD 3	400
Jerry Smith	SD 39	800
Gene Stipe	SD 7	200
Penny Williams	SD 35	1,200
House	**District**	**Amount**
Larry Adair	HD 86	$700
Jari Askins	HD 80	900
Gary Bastin	HD 94	250
Jack Begley	HD 61	250
Loyd Benson	HD 63	600
Debbie Blackburn	HD 88	850
Betty Boyd	HD 23	1,450
Flint Breckinridge	HD 78	600
Wallace Collins	HD 45	300
Abe Deutschendorf	HD 62	600
Joe Eddins	HD 6	850
Mike Ervin	HD 28	600
Jim Glover	HD 65	500
House (cont.)	**District**	**Amount**
Bill Graves	HD 84	200
James Hagar	HD 36	300
Chris Hastings	HD 79	900
Jerry Hefner	HD 12	300
Joe Hutchinson	HD 5	600
Don Kinnamon	HD 32	400
Ron Kirby	HD 64	600
Al Lindley	HD 93	250
Bill Long	HD 39	400
Doug Miller	HD 46	300
Mike O'Neal	HD 40	400
Fred Perry	HD 69	600
Bob Plunk	HD 25	600
Larry Roberts	HD 7	600
Al Sadler	HD 48	750
Mark Scikel	HD 96	550
Bill Settle	HD 13	400
Dale Smith	HD 27	400
J.T. Stites	HD 2	600
Gary Stottlemyre	HD 77	1,150
John Sullivan	HD 71	800
Gary Taylor	HD 10	300
Michael Thorbrugh	HD 75	600
Opio Toure	HD 99	1,200
Mike Tyler	HD 30	600
Sean Voskuhl	HD 41	550
Robert Weaver	HD 26	1,200
Robert Worthen	HD 87	300

Grassroots Program: Associate Director Vickie W. Rankin worked to expand our "grassroots" participation in the political process, increasing our membership's awareness of the need to raise campaign contributions.

The Doctor-of-the-Day program has been expanded to include some political education and lobbying efforts for our doctors who serve. This has been a positive experience for everyone and has greatly enhanced our lobbying effort.

A number of grassroots contacts have been initiated. Our legislative staff is making the rounds, speaking to specialty societies, county societies and alliance groups across the state, informing them of the legislative issues and the need for their participation in various facets of the legislative process. Members are being strongly encouraged to contribute to AMPAC/OMPAC so that they may have a greater voice at the capitols in Washington and Oklahoma City.

In addition, a "Key Contact" program placing physicians in touch with legislators who serve on "Key" committees or in leadership positions has been developed and appears to be working well. Physicians from around the state have been initiating contacts with these "Key legislators" and positive relationships are developing.

Board's Thoughts About Increasing OMPAC Contributions and By-Laws Changes: OMPAC's Development Subcommittee has worked to develop new recommendations to expand membership in the PAC. The new recommendations will be considered for approval by the OMPAC Board of Directors at the annual meting. Recommendations will include expanded levels of giving, incorporating $100, $200, $500, and $1000 donors with special recognition for each level of giving. A grassroots effort involving physicians who will make fundraising contacts is encouraged.

OMPAC's By-laws are in need of some clean-up and clarification. At the April 8, 1997, OMPAC Board meeting, it was decided that a subcommittee would meet to make some recommendations for By-laws changes. These recommendations are not available at press time, as the subcommittee has not yet met. Such recommendations, if forthcoming, will be made available under separate cover at the annual meeting.

1996 AMPAC Report: The Oklahoma Medical Political Action Committee has won an award from AMPAC for runner-up in the "Greatest Percentage of Members to Potential" among unified states. While we are pleased with the award, we feel that a participation level in OMPAC of only 14.8% of our members is too low, and we will be working to effect an increase.

Note the enclosure in this report, titled "1996 AMPAC Membership Awards." See Addendum A.

Conclusion:

OMPAC is a critical link to a successful legislative program. The unprecedented success of OSMA's legislative agenda this year can be attributed in part to OMPAC's new policy for assessing candidates for contributions and to the increase in size of some of our campaign contributions. It is imperative that new memberships be encouraged in order to build upon our new success.

Elections for the OMPAC Board will

take place during the 1997 OSMA Annual Meeting. Good leadership and broad-based involvement will be critical to OMPAC's future success in enhancing our legislative efforts.

The OMPAC Board of Directors strongly encourages new member contributions and the positive involvement of all OSMA and alliance members in our political process.

On behalf to the OMPAC Board of Directors, I would like to thank each physician and alliance member for their ongoing support of OMPAC.

Respectfully Submitted,
Jay A. Gregory, MD, Chair
Elvin Amen, MD
Jack Beller, MD
Harvey Blumenthal, MD
Richard Boatsman, MD
Chester Bynum, MD
John Carter, MD
Elaine Davis, MD
Norman Dunitz, MD
James Funnell, MD
Eldon Gibson, MD
Joe Hester, MD
C. Wallace Hooser, MD
Douglas Hubner, MD
Barbara Jett, MD
Perry Lambird, MD
Larry Long, MD
G. Lance Miller, MD
Gary L. Paddack, MD
Paul Patton, TCMS
Clarence Robison, mD
Lee Schoeffler, MD
David M. Selby, MD
Sherry Strebel, OSMAA
F. Keith Underhill, MD
Robert Remondino, MD

[Note: Addendum A and other attachments to this report are available at OSMA headquarters.]

OKLAHOMA FOUNDATION FOR MEDICAL QUALITY, INC.

Health Care Quality Improvement Program

HCQIP Project Status

March 27, 1997

Project Name, Concept, and Status:

Use of Thrombolytics In Acute Myocardial Infarction Patients—The purpose of this study was to increase the utilization of thrombolysis in order to provide timely reperfusion of the myocardial tissue. A secondary goal was to increase the usage of aspirin at discharge, since this has been shown to decrease the chance of re-infarction. Aggregate data demonstrated significant improvement in two of the four quality indicators (e.g., receipt of aspirin during admission and discharge on beta blockers.) Improvement was demonstrated on the use of thrombolytic agents; however, it was not significant due to small sample size. *Long-term Monitoring*

Stroke Prophylaxis in Patients with Atrial Fibrillation—OFMQ evaluated the utilization of stroke prophylactic agents (i.e., warfarin and aspirin) among OklahomaMedicare beneficiaries diagnosed with atrial fibrillation. The purpose of this local cooperative project was to increase the utilization of antithrombic or antiplatelet agents in order to prevent the occurrence of stroke in those patients with chronic atrial fibrillation. Aggregate data demonstrated significant improvement in the use of warfarin or aspirin in patients dismissed from the hospital in atrial fibrillation. *Long-term Monitoring*

Heparin Use in Patients with Deep Vein Thrombosis—Deep vein thrombosis (DVT) is a common occurrence affecting about 170,000 people in the United States each year and up to 50,000 people die each year of complications of pulmonary embolism, often as a direct consequence of DVT. The purpose of this local cooperative project was to improve the overall administration of heparin in order to prevent the reoccurrence of DVT. Improvement was demonstrated on all three quality indicators: 1) PTT rechecked within 6 hours heparin initiation - baseline 36%, assessment 65%; 2) PTT therapeutic within 24 hours of heparin initiation - baseline 67%, assessment 94%; and 3) warfarin initiated within 2 days of heparin initiation - baseline 67%, assessment 94%. *Long-term Monitoring*

Antimicrobial Prophylaxis Wound in Elective Surgeries—Wound infections represents a common cause of nosocomial infection in hospitalized patients resulting in prolonged hospital stays and increased cost of care. A variety of randomized trials have been published demonstrating that postoperative wound infections for a variety of surgical procedures can be prevented by the administration of parenteral antibiotics within two hours before the surgical incision. Aggregate datademonstrated significant improvement in the preoperative administration of antibiotics to elective surgicalpatients. Additionally, a decrease in variation in selection of prophylactic antibiotics was also noted. *Long-term Monitoring*

Management of Community Acquired Pneumonia—OFMQ evaluated the management of community-acquired pneumonia among Oklahoma Medicarebeneficiaries. In 1993, the American Thoracic Society published guidelines for the initial management of adults with community-acquired pneumonia. These guidelines review the initial assessment of the patient, assessment of severity, and review the use of initial empiric antibiotic therapy in these patients. The guidelines categorize patients based on the initial evaluation of the patient including need for hospitalization, severity of illness, presence of coexisting disease, and the patient's age. OFMQ evaluated the timing and utilization of sputum and blood cultures and whether antibiotics were administered in a timely fashion. Aggregate data demonstrated significant improvement in the management of patients discharged with CAP. *Long-term Monitoring*

Use of ACE Inhibitors in Congestive

Heart Failure—Congestive Heart Failure (CHF) is the most common principal diagnosis of hospitalized Medicare patients in Oklahoma. Current guidelines support the use of ACE inhibitors as the only class of drugs that prolong survival and decrease the need for hospitalization of patients with CHF. Aggregate data demonstrated significant improvement in the administration of ACE inhibitors to patients discharged with CHF. *Long-term Monitoring*

Evaluating Red Blood Cell Transfusion in Selected Surgeries—This multistate project was initiated in association with the Kerr L. White Institute with Virginia as the lead PRO. OFMQ evaluated the utilization of RBC transfusion due to acute blood loss in elective surgery. The purposes of this multi-state collaborative project included assessing current practice variations for autologous and homologous blood utilization and determining rates of autologous blood wastage and excess homologous blood crossmatching. An overall goal of the project was to increase transfusion safety for Medicare beneficiaries. *Re-evaluation*

Use of International Normalized Ratio—The American College of Chest Physician (ACCP) recommends the utilization of international normalized ratio (INR) to determine oral anticoagulant intensity. During project data collection of other projects (stroke and DVT) it was noted that many of the participating providers did not routinely report INR values. At the conclusion of this project 98% of hospitals reported the INR value. *Long-term Monitoring*

ACE Inhibitors in Diabetics with Mild to Moderate Nephropathy—The use of ACE inhibitors in patients with insulin dependent diabetes mellitus and early diabetic nephropathy has been shown to reduce the rate of progression to the combined endpoints of death, dialysis, or renal transplantation. Preliminary data suggests the same effects of ACE inhibitors in non insulin-dependent diabetes mellitus. Aggregate data demonstrated: 1) an improvement in the use of ACE inhibitors in patients with clinical findings suggestive of early diabetic nephropathy, however, the improvement was not statistically significant due to small sample size, and 2) a substantial number of patients with diabetes did not have a urinalysis performed and in those patients with diabetes, proteinuria, and no evidence of infection, the diagnosis of diabetic nephropathy was not made in 1/4 of the cases. *Long-term Monitoring*

Management of Localized Prostate Cancer—Cancer of the prostate represents the most common male malignancy and the second most common cause of cancer death in men. Up to 10% of men will have a clinical diagnosis of prostate cancer during their lifetime and many more will have silent disease confined to the prostate. Because of unproved diagnostic tests, the reported incident of prostate cancer is increasing, however, the mortality of this disease has not changed. The use of radical prostatectomy to treat localized prostate cancer has increased markedly in the United States over the last five years. OFMQ will evaluate the appropriateness of all radical prostatectomies performed during calendar years 1993 and 1994, on patients aged 65 years and older. Due to the prevalence of surgical complications and recurrent carcinoma (within 4 years) in patients having underwent radical prostatectomy, it is important to assess the necessity of these procedures. *Re-evaluation*

Breast Conserving Therapy for Breast Cancer—Breast cancer is the most common malignancy afflicting women and the second most common cause of death from cancer in women. Both the incidence and mortality from breast cancer increase with age. Since 1986, studies evaluating outcomes of patients treated for early stage breast cancer have shown that breast conserving surgery followed by radiation therapy and mastectomy yield equivalent 10-year survival. Despite these studies, there has been slow adoption of breast-conserving approaches to the treatment of early stage breast cancer. OFMQ will evaluate the appropriateness of mastectomies and assess whether a procedure of lesser extent (e.g., lumpectomy or quadrantectomy) could have alternatively been performed during fiscal year 1994. *Re-evalnation*

Evaluating Carotid Endarterectomy—Ischemic stroke represents the third leading cause of death and the most common cause of permanent disability in the United States. Carotid endarterectomy has been widely utilized as a procedure to reduce the risk of stroke and represents the most commonly performed peripheral arterial surgery. This project aims to prove the use of carotid endarterectomy (CE) among Medicare beneficiaries in Oklahoma. Following recently published guidelines, this study will examine whether individuals who receive a CE in FY 1993 and 1994, met the established criteria. This project explored the appropriateness of the surgical candidates and whether the surgeon and hospital CE volume and/or variations in surgical technique affected patient outcome. *Re-evaluation*

Endoscopy in the Outpatient Setting—Gastrointestinal endoscopic procedures represent some of the most commonly performed procedures inMedicare beneficiaries. Over 23,000 procedures were performed during FY 1994 alone in Oklahoma.Guidelines regarding training, granting the privileges, and indications for endoscopic procedures have been published by the American Society for Gastrointestinal Endoscopy. The goal of this local cooperative project was to evaluate the adherence to the guidelines for endoscopic procedures among Oklahoma's Medicare beneficiaries. Records will be reviewed to ascertain whether appropriate medical management was entertained prior to invasive endoscopy. Aggregate data demonstrated significant improvements in the documentation history and physical examination of patients and documentation of indications for the endoscopic procedure in all participating facilities. *Long-term Monitoring*

Early Detection of Breast Cancer—Breast cancer represents the most commonly diagnosed malignancy in Oklahoma female Medicare beneficiaries and the second most common cause of cancer death in women. The risk of breast cancer increases with age and the ben-

efits of screening examinations including clinical breast examination and screening mammography also increase with age. In spite of the fact that screening mammography is a covered benefit in the Medicare program, data from HCFA reveal that screening mammography is underutilized by Oklahoma female Medicare beneficiaries. Due to the high prevalence of breast cancer in females, OFMQ developed a cooperative project to evaluate the utilization of mammographic services throughout Oklahoma. Mammography utilization rates by county will be established through the analysis of Part B claims. The rate of breast cancer confirmation (including stage of malignancy at diagnosis) will be established through the analysis of tumor registry logs. Medical records of female Medicare beneficiaries (without a diagnosis of breast cancer) will be abstracted to determine whether a mammogram was warranted during the hospitalization and whether a "missed opportunity" for obtaining a mammogram occurred. *Re-evaluation*

Appropriateness of Right Heart Catheterization with Left Heart Catheterization—Although there are certain instances where a right heart catheterization is indicated to obtain cardiac output and pressures, current literature suggests that many right heart catheterizations are not medically indicated. Studies suggest that while right heart catheterization is not hazardous, it normally does not provide information that alters patient management and, therefore, is probably not cost-effective. The goal of this project was to evaluate the performance of right heart catheterization among Oklahoma beneficiaries. *Long-term Monitoring*

Evaluation of Nuclear Scans and Treatment of Pulmonary Embolism—OFMQ plans to review cases where a perfusion lung scan was performed to assess the physician's response to scan interpretation and compare those interpretations and physician actions to patient findings abstracted from the medical record. Information will be abstracted to ascertain whether the patient received appropriate care as related to a perfusion lung scan diagnosis of high probability of pulmonary embolism (PE), indeterminate, and normal scan in the context of the patients risk factors for venous thromboembolism. The initial treatment of those patients with suspected PE will also be reviewed. *Analysis*

Evaluation of Transient Ischemic Attacks—This is a multi-state project in association with the Kerr L. White Institute. Georgia is the lead PRO in this effort. The goal of this project is to improve the rates of evaluation for carotid endarterectomy (CE) among patients hospitalized for transient ischemic attack (TIA). Patients experiencing TIAs may have a two year stroke rate as high as 57%, and CE has been shown in prospective randomized studies to be highly effective in reducing this rate. The study will examine whether individuals who were admitted for carotid TIAs were properly evaluated to determine if they were appropriate candidates for CE. *Intervention*

Evaluation of Critical Laboratory Value Protocols—The practice of urgent notification of critical lab values has been used for more than 20 years. Accreditation agencies (enforcement of the Clinical Laboratory Improvement Act) require clinical laboratories to catalog critical limits, standardize notification procedures, and document the results and the clinician who was notified. The goals of this local cooperative project are to evaluate Oklahoma hospital's critical lab protocols, determine whether critical lab protocols are being routinely used, and provide informational feedback regarding this issue to the participating providers. *Re-evaluation*

Assessment and Treatment Pressure Ulcers—In February 1995, the Agency for Health Care Policy and Research (AHCPR) released clinical practice guidelines regarding the treatment of pressure ulcers. Pressure ulcers are a common and costly problem in acute care, nursing home, and home care populations. The reported prevalence rate in the acute care setting has ranged between 3.5 to 29.5 percent. The estimated total national cost of pressure ulcer treatment exceeds 1.3 billion dollars a year. It is estimated that implementation of the recommendations provided in the AHCPR guidelines would reduce the cost of pressure ulcer treatment by 3% ($40 million) in the United States. Using AHCPR guidelines, OFMQ will evaluate patient assessment for and treatment of pressure ulcers. *Intervention*

Evaluation of Open and Laparoscopic Cholecystectomy—Approximately 10 to 15% of the adult population or more than 20 million people in the United States have gallstones. Until 1990, the prevailing treatment of symptomatic gallstones was an open operation through an abdominal incision to remove the gallbladder. Laparoscopic cholecystectomy is a new surgical approach to gallstone treatment and was first performed in the US in 1988. OFMQ will evaluate variables such as length of stay, complications, and death for patients who underwent a laparoscopic cholecystectomy versus patients who underwent an open cholecystectomy. We will also review laparoscopic complications that result in conversion to open cholecystectomy procedures. *Re-evaluation*

Anticoagulant Management of Venous Thromboembolism (KLWI)—OFMQ is the lead PRO in a new Kerr L. White Institute multi-state project. This project is a "spin-off" project from OFMQ's original deep vein thrombosis (DVT) project. Approximately 100,000 Medicare beneficiaries are admitted to the hospital with venous thromboembolic disease each year. The condition is associated with a high mortality rate and this high mortality rate appears to increase with age. This project will assess statewide and interstate variations in the following aspects of the management of DVT: 1) methods of diagnosis of DVT; 2) initial heparinization according to professionally endorsed recommendations; 3) subsequent maintenance therapy with heparin including duration of treatment and monitoring of therapy; 4) initiation of warfarin according to pro-

fessionally endorsed recommendations; and 5) to increase adherence to professionally endorsed recommendations in the care of Medicare beneficiaries who present to the hospital with venous thromboembolic disease. *Intervention*

Management of Heliobactorpylori in Medicare Patients with Peptic Ulcer Disease—It is estimated the prevalence of peptic ulcer disease (PUD) (gastric and duodenal disease) is approximately 4 million cases within the US, with an incidence of about 350,000 new cases per year. OFMQ is collaborating with the Kerr L White Institute for Health Services Research on a multi-state project concerning PUD and the related treatment of H. pylori. Colorado is the lead PRO for this project. The objectives of this study will be to increase the appropriate evaluations for H. pylori infection confirmation and monitoring of H. pylori eradication treatment for Medicare beneficiaries with duodenal and/or gastric ulcers, to increase the appropriate use of antibiotics for Medicare beneficiaries infected with H. pylori who have duodenal and/or gastric ulcers, and to reduce the number of hospitalizations due to persistent or recurrent PUD and its complications. *Intervention*

Risk Factors for Falls in Elderly Hospitalized Patients—Falls in hospitalized Medicare beneficiaries are a common occurrence and are often associated with a number of identifiable risk factors. Falls in elderly hospitalized patients often result in serious injury and the morbidity of an injury such as a femur fracture poses a serious problem to the patient, family members, and health professionals. This local cooperative project will evaluate the identification of risk factors which place the patient at a higher risk of falling. By utilizing certain risk factors, the nurse can identify "at risk" patients on admission. Additionally, OFMQ will evaluate whether preventive measures are utilized for this group of high risk patients. *Intervention*

Cooperative Cardiovascular Project (HCFA National Project)—Ischemic heart disease represents the most common cause of death in the United States. It is estimated that up to 1.25 million Americans experience an acute myocardial infarction (AMI) each year. AMI is a common reason for admission (5,319 hospitalizations in FY 1994) in Oklahoma's Medicare population. CCP represents the first nation wide quality improvement project developed by HCFA working in conjunction with PROs designed to define care rendered to Medicare patients with AMI and to demonstrate measurable improvement in the quality of care for these patients. OFMQ's project feedback will focus on the following quality indicators: 1) confirmation of the AMI, 2) reperfusion, 3) timing of thrombolytics, 4) timing of emergent PTCA, 5) aspirin during the hospitalization, 6) aspirin at discharge, 7) beta blockers at discharge, 8) ACE inhibitors for low LVEF, 9) avoidance of calcium channel blockers for low LVEF, and 10) smoking cessation counseling. *Intervention*

Benign Prostatic Hypertrophy (Pilot PRO in HCFA MQIS Project)—Oklahoma is a pilot PRO in this HCFA Medical Quality Indicator System (MQIS) project regarding BenignProstatic Hypertrophy (BPH). Alabama is the lead PRO in the project. The study will focus on the followingindicators: 1) patients with BPH undergoing transurethral prostatectomy (TURP) should have one or moreindications (listed on form) for surgery documented; 2) patients with BPH undergoing a TURP should have appropriate preoperative diagnostics (listed on form); 3) patients with BPH undergoing surgery have one or more of indications (listed on form) for an intravenous pyelogram (IVP) or renal sonogram documented if either was performed as part of the preoperative evaluation in the inpatient setting; and 4) surgery time and the amount of tissue resected should be documented in patients undergoing surgical treatment of BPH. *Project Aborted by HCFA*

Prophylaxis Against Venous Thromboembolism in Surgical Patients—Venous thromboembolism is a major cause of death and morbidity among hospitalized patients. The rationale for prophylaxis of venous thrombosis is based on the clinically silent nature of the disease. Both deep venous thrombosis (DVT) and pulmonary embolism (PE) manifest few specific symptoms, and the clinical diagnosis can be unreliable. The first manifestation of this disease may be a fatal PE. Unrecognized and untreated DVT may also lead to long-term morbidity from the postphlebitic syndrome and predispose patients to future episodes of recurrent thromboembolism. Carefully conducted clinical trials have shown that it is easier to prevent thrombi from forming then to treat them after formation. This project evaluated whether selected surgery patients received appropriate prophylaxis. *Feedback*

Treatment of Osteoporosis—The National Institute of Arthritis and Musculoskeletal and Skin Diseases determined that osteoporosis affects more than 25 million people and predisposes more than 1.3 million fractures annually costing the United States more than 1 0 billion dollars. Since the elderly are at the greatest risk for osteoporotic fractures, the progressive aging of the world's population predicts a substantial increase in the global burden of osteoporosis. OFMQ's project will evaluate the utilization of preventative measures and treatment of patients with osteoporosis. *Project Data Collection*

Management of Acute Ischemic Stroke in Small Hospitals—Stroke represents the third leading cause of death and the most common cause of serious disability in the US In 1992, approximately 500,000 Americans had a stroke and of these, approximately 150,000 died. The National Stroke Association estimates that there are over three million stroke victims alive today and that costs exceed 30 billion dollars a year in direct medical expenses and lost productivity. During 1995, there were 2,335 Medicare admissions with a principal diagnosis of stroke. In September of 1994, the American Heart Association published guidelines regarding the management of patients with acute ischemic stroke. This project evaluated the management of acute ischemic stroke among Okla-

homa's Medicare beneficiaries. *Feedback*

Cataract Surgery and YAG Capsulotomy: Indications and Timing—Cataract surgery performed to remedy functional impairment due to cataract in the adult is the most common surgical procedure performed on Americans age 65 and over. Posterior capsular opacification is a natural consequence of cataract surgery. As the opacification increases, the patient begins to notice a decrease in visual function that can lead to functional impairment. Although the time to onset of capsular opacification is quite variable in individual patients, in general, the need for YAG capsulotomy increases with time after cataract surgery has been performed. Capsular opacification severe enough to impair function significantly requiring YAG capsulotomy should be a rare occurrence within 3 months of modern cataract surgery, uncommon in the first 6 months, and based on available data should only occur in approximately 25% of patients within the first two years after surgery. This project will focus on the following quality indicators: 1) % of patients having a cataract procedure with indications present, 2) % of patients having a cataract procedure who in the subsequent six months had a YAG capsulotomy in the same eye, and 3) % of patients who had a cataract procedure in one eye who also had a subsequent cataract procedure on the opposite eye within one year. *Development*

Management of Community Acquired Pneumonia II—OFMQ evaluated the management of CAP among Oklahoma Medicare beneficiaries in an earlier project.Current guidelines recommend obtaining blood cultures, sputum cultures with gram stains (if possible), and initiation of antibiotic therapy on initial presentation to the hospital. During our initial project we evaluated the timing and utilization of sputum and blood cultures and whether antibiotics were administered in a timely fashion. For this project a group of 16 hospitals (who had not initiated a pneumonia project in the interim) with like characteristics to the original cohort of hospitals was selected. The sample has been divided into two time frames. A "control" sample was selected from the time frame of the original project and a second sample was selected with recent admissions. Differences in comparison to our original cohort of hospitals over time will be analyzed. *Feedback*

Stoke Prophylaxis in Patients with Atrial Fibrillation II—OFMQ plans to modifly its original project and include additional providers (excluding the five providers who participated in the original study). The project evaluated the utilization of stroke prophylactic agents (i.e., warfarin and aspirin) among Oklahoma Medicare beneficiaries diagnosed with atrial fibrillation. The original project demonstrated low utilization rates in the five hospitals studied. The purpose of this local cooperative project is to increase the utilization of antithrombic or antiplatelet agents in order to prevent the occurrence of stroke in those patients with chronic atrial fibrillation. *Feedback*

1996-1997 Preventive Vaccines—HCFA has encouraged all PROs to implement community-based improvement projects for influenza immunization in an effort to promote mass influenza immunization and billable claims. HCFA's objectives for the 1995 Influenza Campaign include the following: to increase Medicare billing activity by mass immunizers, to increase immunization rates for providers using a "target-based" approach, to improve the efficiency of influenza immunization in outpatient health care settings, and to increase the proportion of beneficiaries receiving influenza immunizations in high risk counties. *Evaluation*

Urinary Tract Infection MQIS—Urinary tract infection (UTI) is the most common cause of admission for acute febrile disease and during FY 1994 (October 1, 1993 through September 30, 1994) was the 6th most common reason for admission by principle diagnosis in Oklahoma. The UTI project addresses the following indicators: 1) the timely administration of parenteral antibiotics within four hours of presentation and 2) obtaining the appropriate culture data. Anticipated long-term outcomes include decreasing length of stay and reducing costs of care by timely antibiotic administration. The goal of decreasing morbidity and mortality might be attained by obtaining appropriate culture data. *Analysis*

Red Blood Cell Transfusion in Total Knee Replacement—The increased incidence of transient local blood shortages combined with the ever-present possibility of a large-scale accident or natural disaster suggests that blood products may not always be readily available to patients in need. Total knee arthroplasty, a common procedure in the Medicare population, is often associated with significant blood loss for which a transfusion may be needed. The goal of this project is to reduce the transfusion of unnecessary autologous and homologous units of packed red blood cells to patients undergoing elective total knee replacement. Additionally, to improve the medical record documentation of indications for red blood cell transfusion. *Project Data Collection*

Multi-state Carotid Endarterectomy (HCFA)—The objective of this multistate project is to improve outcomes of patients who undergo carotid endarterectomy (CE). OFMQ will initiate a statewide voluntary CE registry and will provide hospitals with ongoing data for bench marking, quality improvement activities, and physician feedback. We hope to develop a platform for identifying processes which may be linked to improved outcomes in CE. *Project Data Collection*

A Randomized Trial of Practice Behavior Change Strategies for Improving the Diagnosis and Management of CHF (KLWI)—More than 2 million Americans suffer from the effects of CHF, and approximately 400,000 new cases arediagnosed each year. Mortality is high, with five-year mortality rates in the range of 50%. Additionally, quality of life is often adversely affected by symptoms and reduced functional capacity. The goals of the multi-state project include: 1) to

increase the number of CHF cases that have the nature of the ventricular dysfunction, either systolic or diastolic documented in the medical record; 2) to increase the utilization of angiotensin converting enzyme inhibitors (ACEI) in patients with left ventricular systolic dysfunction (LVSD); 3) to increase utilization of ACEIs to optimum dosage levels for therapeutic effectiveness in patients with LVSD; 4) to increase the utilization of anticoagulants in the management of patients with atrial fibrillation; 5) to increase the proportion of patients with confirmed heart failure who are given discharge instructions regarding daily weight monitoring; 6) to increase the proportion of patients with confirmed heart failure and are current smokers who receive discharge counseling on smoking cessation; and 7) to increase the proportion of patients with confirmed heart failure who receive discharge counseling on a low sodium diet. *Project Data Collection*

Stroke Prevention in Atrial Fibrillation (KLWI)—Stroke is responsible for a major burden of disability among Medicare beneficiaries. It has been estimated that about 80,000 strokes occur each year related to atrial fibrillation (AFIB). Statistics reveal that 5% of all patients with AFIB are age 65 and older and the prevalence of AFIB increases with age, such that over age 80 over one third of all strokes are estimated to be related to AFIB. The objective of this multi-state project is to improve the utilization of anticoagulation for stroke prevention for Medicare patients with AFIB. *Project Data Collection*

Managed Care Cooperative Cardiovascular Project—In 1992, acute myocardial infarction (AMI) was the second leading cause of admission to hospitals for the 35.6 million Medicare beneficiaries. AMI was also the cause of 2.8% of all Medicare short-stay hospitalizations. The goals of this managed care project include: 1) to improve the management of patients with AMI on admission including the administration of aspirin and thrombolytic agent or PTCA as appropriate; 2) to improve the ongoing inpatient management of patients with AMI including the daily administration of ASA and the provision of patient education regarding diet and smoking cessation; and 3) to improve the management of patients with AMI at discharge for the hospital including the administration of beta-blockers as appropriate, the administration of ACE inhibitors to appropriately selected patients with poor left ventricular function (LV), and the avoidance of administration of selected calcium channel blockers to patients with poor LV function. *Project Data Collection*

Cooperative Cardiovascular Collection of Best Practices Project—Following the national implementation of the Cooperative Cardiovascular Project, HCFA awarded four special contracts to a PRO in each region to collect and analyze best practices associated with AMI care as a result of the CCP project. Oklahoma was awarded the contract for our region. Each PRO in the region was asked to submit six best practice hospital quality improvement plans for the state. An objective data base will be created and analyzed from the collected data. Additionally, a random sample of ten hospitals from each region will be contacted for an in-depth interview regarding the internal quality improvement processes at their facility. The final report will include an analysis of AMI quality improvement activities implemented nationally as a result of the CCP project. *Project Data Collection*

Cooperative Cardiovascular Enhanced Intervention Project—Following the national implementation of the Cooperative Cardiovascular Project, HCFA awarded Oklahoma a special project to test enhanced intervention methodologies in multiple states. Working with Georgia and Missouri, Oklahoma will develop an educational training program to be used in the training of physician "champions" recruited at each participating hospital. The participating hospitals will be provided additional resources including, but not limited to, additional copies of the AHA/ACT Guidelines, sample improvement plans, sample clinical pathways, sample reminder systems, simple electronic data collection tool, and copies of baseline CCP data with state comparisons. *Project Data Collection*

Region VI Beneficiary Stroke Awareness and Medication Compliance Project—Stroke is a leading cause of major disability and the third leading cause of death. Stroke results in more than 500,000 hospitalizations, 15,000 deaths and 30 billion dollars in costs each year. The objectives of the regional stroke project are to reduce the incidence of stroke in Medicare beneficiaries with atrial fibrillation and to reduce the incidence of bleeding complication related to long term anticoagulation in Medicare beneficiaries with atrial fibrillation. *Implementation*

Coronary Artery Bypass Graft Project—Alabama has initiated a coronary artery bypass graft project and Oklahoma will serve as the control state for this project. The objectives of the project include improving processes of care for patients undergoing CABG surgery and to decrease the rate of adverse outcomes for patients undergoing CABG surgery. Hospitals in Oklahoma will receive their data following the completion of the Alabama project, probably in 1998. *Project Data Collection*

Outpatient Diabetes Project—Diabetes mellitus is a chronic disease that impacts a large portion of the population and consumes a significant amount of U.S. health care dollars. It is estimated that 9-10% of the Medicare population has diabetes and that 27% of the Medicare budget is spent on this disease. The objectives of this project are to increase compliance rates with the American Diabetic Association Guidelines for care and improve physician practice patterns in outpatient care and early monitoring for diabetic patients. *Development*

Annual Meeting Scrapbook... Photography by Jerry Hymer


































Annual Meeting Scrapbook...





























OSMA MISSION STATEMENT*

To promote the best health for the people of Oklahoma in a professional, ethical, and compassionate manner by advocating for patients, representing physicians, and promoting the art and science of medicine.

GOALS

1. **Assume a more active and visible role in promoting and improving health education.**
2. **Increase physician membership and participation in OSMA.**
3. **Increase participation in legislative and regulatory processes.**
4. **Secure significant physician input in all managed care decisions.**
5. **Increase the unity and collegiality of our profession.**
6. **Improve and enhance organizational effectiveness and membership services.**
7. **Communicate more effectively and efficiently with OSMA membership, patients, and the people of Oklahoma.**

Goal 1
Assume a more active and visible role in promoting and improving health education.

1.1 Develop positive press releases (6-8 releases) working with the Council on Public & Mental Health; assign a staff person to handle this.
1.2 Encourage MDs to promote public health in their own offices and private practice with literature, pamphlets, and personal contact.
1.3 Bring the Alliance into promoting public health when possible.
1.4 The OCMS "Schools of Excellence" and health should be expanded to the rest of the state starting with Tulsa.
1.5 Continue OSMA involvement and leadership in OSDH Mental Health and Substance Abuse Services in the development and distribution of health messages (OCHIO).
1.6 Ongoing TV and radio program.
1.7 Continue to push immunizations for adults and children.
1.8 Increase physician participation on Boards and Councils through the legislative process (appoint someone who shows up).
1.9 Address health education in the schools.

Goal 2
Increase physician membership and participation in OSMA.

2.1 Better communication with membership about OSMA/AMA and what it is doing.
2.2 Promote DO membership; only ACGME certified.
2.3 Continue support of unified membership status.
2.4 Listen to OSMA non-members with regard to unified membership problem.
2.5 Examine the idea of the dues structure for those 900 MDs who are not members, and look at who and where they are.
2.6 Invite physicians individually to participate in Councils, Committees, etc. especially 35-50 years of age.
2.7 Convince membership that others will recognize benefits from participation.
2.8 OSMA information should go to all members, not just 250, and develop a fax tree.

Goal 3
Increase participation in legislative and regulatory processes.

3.1 Increase grassroots involvement between physicians and legislators.
3.2 Analyze legislator voting records and provide commensurate OMPAC financial support.
3.3 Reactivate "Doctor of the Day" program in the legislature.
3.4 Restructure Council on State Legislature and Regulation.
3.5 Develop a legislative agenda.
3.6 Upgrade software to track legislative activity.
3.7 Add full-time staff to support legislative monitoring activity.
3.8 Increase number of individual contributors/contributions to OMPAC and AMPAC
3.9 Encourage OSMA/Alliance members to seek political office.

Goal 4
Secure significant physician input in all managed care decisions.

4.1 Gain membership on managed care task force.
4.2 Remove the "gag rule."
4.3 Create organized medical staff structure for physicians participating in managed care plans.
4.4 Support present physician-owned managed care organizations.
4.5 Establish a clearing house for managed care decisions and complaints.
4.6 Establish a committee to develop quality of care standards for managed care.
4.7 Establish "due process" for physicians.
4.8 Establish standardized credentialing process for managed care organizations.
4.9 Promote and guarantee open enrollment.
4.10 Require treatment evaluation decisions be made by Oklahoma-licensed MDs/DOs.

*The OSMA Mission Statement and Goals were formulated by the OSMA Council on Long Range Planning and Development at a meeting this spring.

Mission and goals *(continued)*

Goal 5
Increase the unity and collegiality of our profession.

5.1 Be civil even in disagreements; respect your fellow MD.
5.2 Convince physicians that OSMA is the only organization in the state that crosses all lines to unify physicians.
5.3 Have OSMA act as a neutral source and find systematic ways of dealing with differences of opinion.
5.4 Identify common interests and problems of physicians and address those as a whole, then respond to these.
5.5 Explore possibilities of re-instating physician courtesy for services rendered.
5.6 Improve communication with members, specialty groups, councils.
5.7 We need proper perception of issues.
5.8 Lack of unity comes when the issue of some is money, not principle, and with others it is principle, not money, i.e., Rural vs. Urban, Hospital vs. Hospital, HMO vs HMO, Specialty vs. Specialty.
5.9 Implement #1-4 visions and goals.

Goal 6
Improve and enhance organizational effectiveness and membership services.

6.1 Completion of CEO search.
6.2 Utilize new technology, voice mail, fax with MD, computers, e-mail.
6.3 Practice enhancement program.
6.4 Look into hiring PR specialist.
6.5 Have more effective use of fax and e-mail.
6.6 Possible restructuring of staff duties after CEO hiring, e.g. PR person or firm being hired.
6.7 Have a membership recruitment program.

Goal 7
Communicate more effectively and efficiently with OSMA membership, patients, and the people of Oklahoma.

7.1 Utilize new technology.
7.2 Public Relations.
7.3 Use of fax and e-mail.
7.4 Press Releases.
7.5 Internet.
7.6 Recognize the Alliance as an equal partner.
7.7 Speakers bureau.

1996-97 Necrology Report

Honor the physician for the need thou has of him; for the Most High hath created him. For all healing is from God, and he shall receive gifts of the King. The skill of the physician shall lift up his head, and in the sight of great men he shall be praised. The Most High hath created medicines out of the earth, and a wise man will not abhor them. Was not bitter water made sweet with wood? The virtue of these things is come to the knowledge of men, and the Most High hath given knowledge to men, that he may be honored in all his wonders. By these he shall cure and shall allay their pains, and of these the apothecary shall make sweet confections, and shall make up ointments of health, and of his works there shall be no end. For the peace of God is over all the face of the earth .

Sirach (Ecclesiastes) 38: 1-8

Robert Douglas Anspaugh, MD
Leslie Arvin Arneson, MD
Carl Archie Barclay, MD
Ronald S. Barlow, MD
Charles Leonard Benson, MD
Bruce Hunter Brown, MD
Kieffer Dixon Davis, MD
Ollie Wayne Dehart, MD
Ralph Carroll Denny, MD
William Jackson Dowling, MD
John Hartwell Dunn, MD
Ellis Edwin Fair, MD
James Jackson Gable, Jr., MD
Ronald Wallace Gilchrist, Jr., MD
John Andrew Graham, MD
Charles Eugene Green, MD
William Norris Harsha, MD
William Allen Heflin, MD
Robert Moran Herlihy, MD
Thomas Dewey Howard, MD
Erma Ossip Johnson, MD
John Walker Johnson, Jr., MD
James Polk Luton, MD
Ralph Richard Markland, MD
Coye Willard McClure, MD
Henry Hubert Modrak, MD
William Manning Moore, MD
Marlene Marie Normand, MD
Cole Dilling Pittman, MD
Herschel Jerome Rubin, MD
Hobart Curtis Sanders, MD
Kenneth Rex Scivally, MD
Bertram Edward Sears, MD
Joseph Self, MD
Jesse Day Shipp, MD
Logan Albert Spaun, MD
Thomas McNeil Story, MD
Edward J. Tomsovic, MD
Walter Wicker, Jr., MD
Hays Richman Yandell, MD

OHCA responds to OSMA's concerns and resolutions on SoonerCare

This article came to the *Journal* under the following cover letter:

To the Editor: *In the May-June 1997 (Vol. 90, No. 5) edition of the* Journal of the Oklahoma State Medical Association, *a report was published entitled "Report of the Ad Hoc Committee on the Oklahoma Health Care Authority and SoonerCare" which outlined concerns regarding Oklahoma's Medicaid managed care program. The report seriously questioned the Oklahoma Health Care Authority's ability to administer Oklahoma's Medicaid program. However, in an attempt to justify this, the report relied on a number of inaccurate statements regarding operational aspects of the SoonerCare program. Moreover, the majority of the report was comprised of anecdotal information as well as undocumented assertions. For example, the statements regarding the alleged decline in EPSDT and immunization rates under the SoonerCare program were unsupported. We are, therefore, providing you with a written response to each of the OSMA's concerns and resolutions. We believe this document will provide you with more accurate information regarding the Authority and the SoonerCare program.*

The Authority is committed to the success of the SoonerCare program without compromising quality of, or access to, health care services for Oklahoma's Medicaid population. In meeting this commitment, the Authority has provided hundreds of statewide forums in which stakeholders could have their comments heard, as well as voice their concerns. The Authority has clearly demonstrated its willingness to incorporate external comments and suggestions by the adjustments made to the year two Primary Care Case Management contract. The Authority is also continuing efforts to communicate with OSMA members as well as all types of health care providers throughout the state in an effort to maintain ongoing dialogue related to program-specific perceptions and needs.

As is clearly indicated in the Authority's response, many of the Ad Hoc Committee's statements are inconsistent with the reality of the SoonerCare program. To correct the inequities created by the initial publication of the Ad Hoc Committee's Report, we are requesting the enclosed response be printed in the next OSMA Journal.

We greatly appreciate your time and attention in this matter. Please feel free to contact us if you have any questions or comments regarding the Authority or the SoonerCare program.

Sincerely,

Garth L. Splinter, MD
Chief Executive Officer
OSMA Member

Lynn V. Mitchell, MD, MPH
Medical Director
OSMA Member

John Bumpus, MD
Senior Medical Consultant
OSMA Member

Oklahoma Health Care Authority Response to Oklahoma State Medical Association's Concerns and Resolutions

Introduction

Over the last three years, the Oklahoma Health Care Authority has engaged in the development and administration of the state's Medicaid managed care program called SoonerCare. The Authority is obviously committed to the program's success as well as to ongoing dialogue with providers and patients. This will enable the program to attain its goals of providing increased access to quality health care services for all Medicaid recipients throughout the state. Moreover, this commitment is demonstrated by the Authority's willingness to develop and provide hundreds of public forums in which those affected by the program could have their comments heard, as well as voice their concerns. Further, the Authority has clearly demonstrated its willingness to incorporate external comments and suggestions by the adjustments made to contracts for those participating in the SoonerCare program.

It is understood by the Authority that health care providers throughout the state play an integral role in the operation, and ultimately, the success of the SoonerCare program. The agency is, nevertheless, bound by legislation and significant budgetary pressures to develop and administer a managed care delivery system within the Medicaid program. It is

OHCA response (continued)

here, wherein, the challenge lies—balancing very real expectations and needs with fiscal realities.

In its enabling legislation, the Authority was charged with the oversight of all state-purchased and state-subsidized health care services—ultimately purchasing the most health care for the Oklahoma taxpayer's dollar. A companion piece of legislation mandated the conversion of the Medicaid program to a managed care delivery system. It is through these pieces of legislation that the agency has demonstrated its ability to not only remain budget neutral, but to also save Oklahoma taxpayers millions of dollars, without eliminating benefits or additional categories of Medicaid eligibles. Reductions in covered populations could affect nursing home clients, the medically needy and some optional pregnant women and children's groups.

The Authority recognizes the concerns of Oklahoma physicians. It is for this very reason the agency is providing this written response to apprehensions voiced by members of the Oklahoma State Medical Association regarding the SoonerCare program. It is paramount that accurate information be provided to physicians so as to assist them in their continued education and understanding of the SoonerCare program. Moreover, not only is the SoonerCare program relatively new to Oklahoma, familiarity with managed care delivery systems and principles in the state is generally limited. With this in mind, it is evident that appropriate educational efforts will be a paramount consideration in the ongoing administration of the SoonerCare program.

Following are the Oklahoma Health Care Authority's responses to a series of concerns raised by the Oklahoma State Medical Association and the Ad Hoc Committee on the Oklahoma Health Care Authority and SoonerCare.

1. Significant problems regarding access to care are being experienced; patients have been assigned to primary care physicians forty miles or more away from home; children within the same family have been assigned to different physicians, and assignment of doctors may change from one month to the next, further confusing the patient.

OHCA Response:
The Oklahoma Health Care Authority is in compliance with all Federal requirements established by the 1115(a) waiver in terms of driving times and distances for primary care services. As of June 1997, there were 51,247 individuals in the rural program with an overall average of 10.5 miles (map miles) from their PCP. There are isolated incidences in which individuals are assigned to primary care providers more than forty miles from their home. However, this is usually because the individual has moved and failed to register their new address with the DHS office in a timely manner. In an effort to increase access to primary health care services, the Authority continues to contract with health care providers statewide on an ongoing basis.

The State is using GeoAccess, a computerized program, to assign beneficiaries to providers. This program is set to ensure that travel time for a recipient will not exceed the 45 mile or 45 minute standard. A recent report generated by GeoAccess revealed that the auto-assignment process, on average, placed individuals within 8.8 miles from their PCP while individuals making a choice of PCP had an increased average distance of 12.14.

Under the SoonerCare Choice program and at the request of Oklahoma pediatricians, children may be assigned to different providers than other family members. This is designed to permit children to receive services through pediatricians or family medicine physicians, regardless of which types of providers are selected by adult family members. In the event families are not pleased with the health care provider to which they have been assigned, effective year two of the SoonerCare Choice program, the recipient can change PCP "without cause" on a monthly basis. Further, SoonerCare Choice takes into consideration equitable distribution of patients to providers in the assignment methodology it uses.

2. The assignment of doctors may change each month and not coincide with the list generated for the physicians' office.

OHCA Response:
A patient may elect to change providers, move to a different area of the state or lose eligibility, thus resulting in provider rosters changing from month to month. The Oklahoma Health Care Authority reconciles the rosters on a monthly basis and adjusts capitation payments accordingly. It is important to note that this does not appear to be a significant problem. In a recent monthly reconciliation, only 15 capitation payments out of a statewide total of over 51,000 had not accurately reconciled.

3. The quality of health care has been affected; immunization and EPSDT rates have decreased and continuity of care has been disrupted, with increased emergency room use noted for primary care.

OHCA Response:
Since no sources were cited, the Oklahoma Health Care Authority is uncertain as to where the data to support this statement was obtained. This may reflect anecdotes shared among providers. Recent analysis has showed marked improvement in the program. During Federal Fiscal Year 1996, 91,371 EPSDT screens were recorded, compared to 74,766 the previous year—a 22% increase. This increase encompasses both urban and rural areas, raising the overall, statewide EPSDT screening rates from 23% to 29%.

Unfortunately, in the traditional fee-for-service program, immunization rates were not monitored because the serum was paid for through the "Vaccine for Children" program and the state only pays for the administration of the vaccine. Therefore, it has not been technically feasible for the monitoring of immunization rates—resulting in a lack of baseline data for comparative purposes.

The Authority has, however, recently collaborated with the Oklahoma State Department of Health (OSDH) to determine immunization rates of two-year-olds within Oklahoma's Medicaid pro-

American Medical Association celebrates Women in Medicine Month

In recognition of the American Medical Association's seventh annual Women in Medicine Month Campaign, scheduled for September, the association will launch a national Congress for women physicians.

The AMA designates Women in Medicine Month, this year with the theme "Women in Medicine: Breaking New Ground," to highlight the accomplishments of women in the profession and their increased numerical growth and significance in the medical workforce.

The national AMA Women Physicians Congress will focus on expanding the role and influence of women in organized medicine and the profession as well as addressing critical women's health and professional issues such as gender-based income disparities and the complexities of balancing professional and family responsibilities.

Women entering the medical field have fueled the growth in physician supply. Since 1970, the number of females has skyrocketed, growing 425%, while the number of male physicians has grown 79%. Today there are almost 150,000 women physicians comprising 21% of all U.S. physicians.

"Women are becoming more visible across the entire face of medicine," said Dr. Nancy Dickey, AMA president-elect. "This diversity benefits both patients and the medical community. Just as we need the perspective of several generations, we need the wisdom of both genders."

The AMA is the largest organization of women physicians in the nation and women continue to represent the fastest-growing segment of AMA membership, outpacing other demographic groups in both numbers and market share.

Membership among medical student and resident physicians is especially strong, reflecting the surge of women entering the field in recent years. Women comprise 42% of medical school students.

As women have entered medicine, they have moved steadily into leadership roles. In Oklahoma, OSMA President-Elect Mary Anne McCaffree, MD, is poised to become the association's first female president next April. Women serve on the AMA Board of Trustees; as presidents of their state, county, and medical specialty societies; and in the AMA House of Delegates. The AMA Council on Long Range Planning and Development reports that the percentage of delegates who are women increased from less than 2% in 1983 to almost 9% by December 1996. In addition, nearly 13% of alternate delegates were women.

For further information, contact Phyllis Kopriva, Women in Medicine Services, 312-464-4392; Marsha Turner, Membership, 312-464-4788; or Lydia Steck, Media, 312-464-5372.

OHCA response *(continued)*

gram. In order to determine the rate, a sub-sample of the Medicaid population was drawn from the OSDH's "1995 and the 1996 Oklahoma Two-Year-Old Survey Results." This study revealed that Oklahoma's statewide immunization rates for two-year-olds within the Medicaid population rose from 67% in 1995 to 71% in 1996. This increase compares favorably with the state immunization rates of 72% to 74% within the same time frames indicated. Comparatively, the percentage of growth within the Medicaid population has been more significant than that of the overall state rate.

The Health Care Financing Administration has reviewed both the Authority's HMO and PCP/CM contracts to assure that the language does not impede EPSDT services or immunization delivery in the program. In addition, marketing information has been developed and appropriately reviewed to ensure that beneficiaries are informed about the availability and importance of preventive services.

4. Significant problems with cost shifting have occurred; patients have been referred to the local emergency rooms and back to their previous physicians to receive care rather than going forty miles or more to their assigned physician and hospital.

OHCA Response:
The Oklahoma Health Care Authority needs specific information related to these concerns. Anecdotally, the Authority has had conversations with several hospitals statewide in which they cited declines in inappropriate emergency room utilization.

Under the traditional fee-for-service program, incentives were not present to monitor, much less decrease, emergency room utilization. Managed care delivery systems, however, provide for these incentives while concurrently employing quality assurance mechanisms.

5. Many problems related to the computer system recur on an ongoing basis; the Oklahoma Health Care Authority has sent over 1,300 letters during 1996 that addressed performance and utilization problems; and about $151,000 in liquidated damages have been assessed against the company for failure to perform.

OHCA Response:
The Oklahoma Health Care Authority recognizes the system's concerns and has taken appropriate, and aggressive, steps to address each individually. The Authority has investigated other viable options, including changing fiscal agents from Unisys to another organization. However, there are few fiscal agents certified by the Federal Government to provide comparable services. Regardless of the fiscal agent used, other states have experienced similar complications. The agency is, nevertheless, committed to resolving systems issues affecting both the SoonerCare and Medicaid fee-for-service programs.

6. In this initial phase of the HCFA Demonstration Project, which has involved only a small (30%) portion of the Medicaid population, these issues are noted. The potential of even greater problems exists as the entire Medicaid population and the Aged, Blind and

((continued)

OHCA response *(continued)*

Disabled becomes included in this project over the remaining 4 years.

OHCA Response:
The Oklahoma Health Care Authority was prepared to implement managed health care services to the Aged, Blind and Disabled populations on July 1, 1997. However, in response to concerns voiced by professional organizations and providers (including OSMA), stakeholders and recipients, the Authority has requested, and was granted, a delay from the legislature in the implementation of services to the Aged, Blind and Disabled population. This was intended to ensure a smooth transition and effective service delivery.

7. The Health Care Authority has acted unethically in its recruitment of physicians.

OHCA Response:
It is uncertain what is intended by this assertion. The Authority strives to maintain the highest ethical standards in its recruitment and retention of physicians and its staff fully believes it has maintained a superior level of integrity. Any reports of unethical activities would be pursued assiduously.

8. The Health Care Authority has grossly disrupted established patient-physician relationships by reassigning patients to different physicians.

OHCA Response:
In order to preserve patient-provider relationships, the Oklahoma Health Care Authority has developed a system in which clients choose their health care provider. Should a patient choose not to exercise their choice, the Authority then aligns them with the nearest, appropriate provider. Following a selection or an assignment, the patients are notified in writing who their health care provider is and informed of their option to change if the selection is unsatisfactory.

The Oklahoma Health Care Authority encourages physicians statewide to communicate with their existing patients regarding the importance of making a choice during their enrollment process. This communication is designed to preserve the patient-provider relationship. The ultimate goal is to provide the patient with a medical home while decreasing the auto-assignment rate.

9. The Health Care Authority gerrymandered counties arbitrarily assigning the designation of urban and rural to fit the Health Care Authority's wishes and not those of patients.

OHCA Response:
Urban and rural catchment areas were initially defined by legislation. However, in order to meet the needs of the clients, providers, the Department of Human Services and the Health Plans, the catchment areas were expanded to include contiguous counties for year two of the urban SoonerCare program. This provided for complete county coverage which, in turn, simplified the program and eliminated complications related to eligibility and recipient and provider education.

Resolution #1: The OSMA, working in conjunction with the state legislature, should seek to reorganize the Health Care Authority so as to reintroduce traditional values in medicine and work towards reestablishing the traditional patient-physician relationship.

OHCA Response:
The Oklahoma Health Care Authority promotes traditional values in medicine through patient choice of provider, the establishment of a medical home, increased community-based services and access to care after hours.

Resolution #2: The new Health Care Authority should allow patient choice of provider, both physician and hospital, and will engender responsibility in the patient.

OHCA Response:
The SoonerCare enrollment process encourages patient choice of provider. The Oklahoma Health Care Authority's goal is to engender responsibility in the patients participating in the program. However, it is recognized as a long-term, ongoing process.

Resolution #3: The new Health Care Authority should remove from the system the mercenary profit taking which currently exists.

OHCA Response:
The Oklahoma Health Care Authority requests specific examples and data related to this allegation.

Resolution #4: The OSMA should meet with the Legislative Oversight Committee to address these serious concerns and develop solutions.

OHCA Response:
The Oklahoma Health Care Authority fully supports constructive dialogue with the Legislative Oversight Committee as well as between individuals, agencies, organizations and health care providers.

Resolution #5: The OSMA should strongly recommend that member physicians contact their State Representatives and Senators to inform them of these issues.

OHCA Response:
As previously stated, the Oklahoma Health Care Authority supports constructive dialogue with any entity OSMA deems appropriate.

Resolution #6: The report of this Ad Hoc Committee should be published in the OSMA* Journal *in order to inform members about the specific nature of the issues with the Managed Medicaid program, SoonerCare.

OHCA Response:
The Oklahoma Health Care Authority fully supports inclusion of the report in the OSMA *Journal* if specific data sources are cited and specific examples used in the narrative.

Report to the Board of Trustees from the OSMA Delegation to the AMA

By Joy A. Gregory, MD, Chairman of the Delegotion

It is with the deepest regrets that I am unable to attend the OSMA Board of Trustees meeting in Enid. The Federation Coordination Team meeting schedule was set by me some 18 months ago, and I had no idea it would confliet with our Board meeting. Be that as it may, Dr. McCaffree has assured me that she would respond to any questions you may have. The following are my thoughts regarding the meeting, some mention of how we do things at the AMA meetings, and some words regarding issues before the House. I would also draw speeial attention to the last paragraph of this report.



Dr. Jay Gregory

First of all, let me state that the events of this House of Delegates meeting were somewhat overshadowed by the passing of Dr. James Todd. The House took several moments during its deliberations to refleet on our long association with Dr. Todd. He will be missed, and his contributions to the AMA will be remembered for years to come.

Your delegation to the AMA convened on Saturday, June 21, at 0730 hours to begin the deliberations before us at the annual meeting of the AMA in Chieago. We went over the business of the House of Delegates whieh consisted of some 95 reports from the various eouneils, as well as some 191 resolutions.

For your information, we have joined with the states of Missouri, Kansas, and Arkansas to form the Heart of Amerieа Caueus within the House of Delegates. This gives us some 22 votes on the floor of the House which makes us a little stronger within the House whieh is of signifieance espeeially during elections. There is considerable interest to including other states in our caucus in the future, but time will tell whether or not we inerease our eaueus. Texas is perhaps the only stand alone state in the House. I would have to say the House is dominated by the Southeastern, the New England, the North Central, and to a lesser degree the Paeifie Rim eaucuses.

We interviewed all of the candidates for office on Saturday. I am happy to announee that Dr. Perey Wooten is now President. You will recall that Dr. Wooten was with us in Tulsa at our annual meeting. Dr. Nancy Dickey is President-Eleet. Dr. Tom Reardon is Chairman of the Board of Trustees.

Sunday through Thursday mornings our work day began

(continued)

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AMA Delegation Report *(continued)*

with an 0630 breakfast with the Heart of America Caucus. These meetings are mandatory for the delegation. Here we continually go over the business of the House. I am happy to announce that your delegation was very faithful in attending these meetings.

During the opening of the House on Sunday, Mr. David Bickham received the Distinguished Service Award for his years of service to the OSMA. He was nominated for this award by a national specialty society.

H.B. 1122 was perhaps the biggest ticket at this year's meeting. Congressman Tom Coburn, MD, even came to testify before the reference committee. The politics of this is entirely too complicated for me to go into at this time. Dr. Coburn did an excellent job of putting forth his views on the issue, and how Washington views the AMA on such matters as "partial birth abortions." In my time with the OSMA, I have never had an issue stir so many of our members as this issue. I received some 22 letters, 21 in favor of and 1 opposing the AMA's support of this bill.

Various members of your delegation spoke eloquently on your behalf during reference committee hearings as well as during the debate in the House. The resolutions we carried on your behalf were for the most part accepted. Advanced Directive for Each Nursing Home Resident had some minor amendments. Insurance Coverage for Immunizations was also amended and adopted. Reducing Unintended Pregnancies was also adopted. The Practice Expense issue received much discussion as anticipated. The House reaffirmed existing policy, and voted for a one-year delay in implementation, that RBRVS be based on data generated by actual resources involved in the provision of physician services, and an evaluation of HCFA's methodology in determining the relative values.

The next meeting of the House will be in Dallas, December 7-10. Due to its proximity, perhaps we could have several OSMA members in attendance. The Heart of America Caucus will be meeting early in the fall to plan out strategies and discuss resolutions. If you have anything you wish us to do on your behalf, or if you have ideas for resolutions which you wish to have introduced, please contact me or any other member of the delegation.

I can not close this report without commending Mrs. Barbara Matthews and Mrs. Kathy Musson for the outstanding job they did in providing staff support during this meeting. For two individuals to attend such a meeting for the first time and to perform in such an excellent manner is truly phenomenal. Thank you, Kathy and Barbara, for a job well done.

—Jay A. Gregory, MD
Chairman
OSMA Delegation to the AMA
Perry Lambird, MD, *Delegate*
Sara DePersio, MD, *Delegate*
Mary Anne McCaffree, MD, *Delegate*
Norman Dunitz, MD, *Delegate*
Gary Strebel, MD, *Delegate*
David L. Harper, MD, *Delegate*
William H. Hall, MD, *Delegate*
W. Frank Phelps, MD, *Alternate Delegate*
William Bernhardt, MD, *Alternate Delegate*
Patrick Lester, MD, *Alternate Delegate*
Mukesh Parekh, MD, *Alternate Delegate*
Greg Ratliff, MD, *Alternate Delegate*
Jack Beller, MD, *Alternate Delegate*
Clarence Robison, Jr., MD, *Alternate Delegate*
Carl T. Hook, MD, *Alternate Delegate*
Ryan Welter, Delegate, *Medical Student Section*
David Stockwell, *Alternate Delegate, Medical Student Section*
Stephen Lester, MD, *Delegate, Young Physician Section*
Rochelle Ablah, MD, *Alternate Delegate, Young Physician Section*
William O. Coleman, MD, *Delegate, Organized Medical Staff Section*

OSMA resolutions to the AMA, June 1997

Resolution 229, Reference Committee B, Advance Directives for Each Nursing Home Resident:

Whereas, much intensive care is delivered in the last two weeks of life; and

Whereas, nursing home residents are often transferred to hospital through emergency rooms (ER) for terminal and other serious medical events; and

Whereas, such patients are often not able to dialogue with ER physicians about their overall health care; and

Whereas, the patient is uniquely empowered legally to determine his wishes with respect to any withholding of intense health care as well as fluid and nutrition and DNR status; now therefore be it

Resolved, that the AMA Council on Legislation be asked to consider and, in the absence of contraindication, urge that state health departments and other nursing home-inspecting agencies require nursing homes to have on file an Advanced Directive (AD) for each resident executed by the patient or legal guardian; and be it further

Resolved, that this AD accompany the resident patient to the hospital.

Resolution 229, Substitute Resolution Adopted:

Resolved, that the AMA encourage nursing homes to discuss with resident patients or their health care surrogates/decision maker as appropriate, a care plan including advance directives, and to have on file such care plans including advance directives; and be it further

Resolved, that when a nursing home resident patient's advance directive is on file with the nursing home, that advance directive shall accompany the resident patient upon transfer to another facility; and be it further

Resolved, that policy H-140.969 be reaffirmed.

Resolution 430, Reference Committee D, Insurance Coverage for Immunizations:

Whereas, Immunization represents one of the most cost-effective means of disease prevention; and

Whereas, lack of insurance coverage for immunization constitutes a significant barrier to protection from vaccine-preventable diseases; and

Whereas, the state of Oklahoma recently adopted a law requiring insurance companies to provide immunization coverage with no co-pays or deductibles; and

Whereas, nearly half of all states now have similar laws; now therefore be it

Resolved; that the American Medical Association endorses laws requiring insurance companies to provide coverage for immunizations with no co-pays or deductibles; and be it

Gov. Frank Keating signs new Oklahoma CME requirements into law

Governor Frank Keating has signed the Oklahoma Administrative Code Title 435 mandating Continuing Medical Edueation requirements for licensure, re-registration of lieensure, or reinstatement of lieensure. For questions regarding the following requirements contact the Board of Medical Licensure at 405-848-4861.

A. Requirements

1. Effeetive July 1, 2000, each applicant for licensure, re-registration of licensure or reinstatement of licensure shall eertify that he/she has eompleted the requisite hours of eontinuing medical edueation (CME).

2. Requisite hours of CME shall be one hundred fifty (150) hours within the preeeding three (3) years of which sixty (60) hours will be Category I as defined by the American Medieal Association/Academy of Family Physicians or other certifying organization recognized by the Board.

B. Exceptions/Verification

1. Exeeptions from the requirement shall be:

(a) Medical Doctors in resideney and fellowship programs.

(b) Medieal Doctors in a Physieian Emeritus status.

(c) Holders of current Ameriean Medical Association Physieian Reeognition Award (AMAPRA) or its specialty equivalent or recertification by specialty group whose program for the certification has been found by the Board to be equivalent to the Physieian Recognition Award.

2. The board staff will, each year, randomly selcet applieations for verifieation that all CME requirements have been met. Physicians ehoosing to use programs other than the AMAPRA must submit additional documentation on request as evidenee that the eomplianee with CME requirements has been met in the specified time period.

C. Compliance

1. Failure to maintain such records rebuts the presumption that CME requirements have been completed.

2. Misrepresenting compliance with CME requirements eonstitutes a fraudulent application.

The Physician's Recognition Award information booklet can be ordered through the OSMA office by calling 405-843-9571 or 1-800-522-9452. For information eoneerning the requirements contaet the Board of Medieal Licensure offiee at 405-848-6841.

AMA Delegation Report *(continued)*

Further Resolved; that the American Medical Association urges states without such laws to adopt similar legislation.

Resolution 430, Amended Resolution Adopted
Second Resolve of Resolution 430 *be deleted.*

Resolution 512, Reference Committee E, Reducing Unintended Pregnancy Through Adequate Funding of Family Planning Services:

Whereas, Forty-five percent (45%) of all live births in Oklahoma result from pregnancies that are unintended and 13% of all live births result from pregnancies that are unwanted; and

Whereas, The Healthy Oklahomans 2000 Sentinel Objective is to reduce unintended pregnancy to 30%; and

Whereas, unintended pregnancies are associated with high risk pregnancies, low birth weight infants, birth defects, infant mortality, abortions, child abuse/neglect, domestic violence, crime and dependence on social welfare; and

Whereas, Oklahoma public health family planning clinics are at capacity and currently serve less than 40% of the estimated number of women, living at or below the federal poverty level, who are in need of family planning services; and

Whereas, Unwanted births in Oklahoma cost State Medicaid a minimum of $22 million each year in prenatal, newborn, and intensive care costs; and

Whereas, family planning services for the uninsured are cost efficient, with every $1 invested saving $6.20 in annual public assistance costs, including Medicaid, Temporary Assistance for Needy Families (TANF), Food Stamps and WIC; now therefore be it

Resolved, That the Oklahoma State Medical Association reaffirms House of Delegates Policy (H-1991) urging health care professionals providing care for women of reproductive age, to assist them in planning for pregnancy, and supports age appropriate education in esteem building, decision making and family life in an effort to introduce the concept of planning for childbearing in the educational process; and be it further

Resolved, That the Oklahoma State Medical Association supports the concept that all pregnancies should be intended at conception and supports increased state funding for the expansion of family planning services in an effort to reduce unintended pregnancies and their associated health and social costs; and be it further

Resolved, That the Oklahoma State Medical Association petition the American Medical Association House of Delegates to reaffirm current policy supporting funding for family planning program (Policy 75.992 A-90).

Resolution 512, Adopted as Amended:
Reducing Unintended Pregnancy (Title Change)
Substitute for the second resolve:
Resolved, That the AMA supports reducing unintended pregnancies as a national goal.

Resolution 814, Reference Commitiee H, Practice Expenses:

Whereas, HCFA has proposed arbitrary changes in the reimbursement payments to be made on the basis of practice expense relative values; and

Whereas, no entity—even HCFA—has been able to collect accurate data at this time that truly reflects the value of these practice expense values for all physicians; and

Whereas, whatever data that has been collected is considered by all, even HCFA authorities, to be flawed; now therefore be it

Resolved, that the OSMA House of Delegates direct its AMA delegation to work to influence the AMA to actively oppose the implementation of the currently proposed and published HCFA practice expense components of the Medicare resource based relative value scale; and be it further

Resolved, that the AMA urge HCFA to employ a basic survey form developed in collaboration with the AMA which could better estimate true practice expenses of all physicians.

Resolution 814, Recommended for Reaffirmation in Lieu of:
Recommendations of Report 13 of the Board of Trustees (I-96), be reaffirmed in lieu of Resolution 814.

Note: Because a significant portion of Dr. Dewberry's letter was inadvertantly omitted in the May/June Journal, it its being reprinted here in its entirety.

A Call for Universal Health Coverage?

To The Editor: I am writing in order to commend Dr. Deckert and the State Board of Health in their efforts to improve the health of the citizens of Oklahoma. I would like to comment on several issues that were addressed in their article on the "State of the State's Health"[1] and furnish a few references that, hopefully, will be helpful to the Oklahoma Consortium for Improving the Health of Oklahoma (OCIHO).

I believe that I hear a call for universal health care coverage in their statement, "We need to assure access to quality health care services for all Oklahomans." Their perspective and presentation of the problem of the uninsured is consistent with the underlying thesis that we can *only* solve our problems with the health of our citizens after we establish universal coverage of health care, despite the fact that countries which have achieved "universal health care coverage" have not seen a corresponding increase in the quality of health care being delivered to their citizens.[2-4]

The statistics regarding deaths from motor vehicle accidents are indeed alarming, and it is my understanding that a high percentage of accidents resulting in fatalities are associated with alcohol use. It is also my understanding that a high percentage of homicides that occur in Oklahoma are related to illicit drug use and trafficking. It seems to me that these issues need to be addressed by tougher law enforcement, rather than interventions by the medical community.[8]

Finally, the issue of teenage pregnancy relates to the high rate of unintended pregnancies, poor prenatal care, and poor postnatal care manifested by poor immunization rates and high rates of child abuse because of a lack of mature, responsible parenting. In 1987 the State Legislature initiated an effort to address the problem of the high rate of adolescent sexual activity as it related to the risk of contracting AIDS by passing HB 1476 which mandated AIDS prevention education be taught in Oklahoma Schools. The State Department of Education and State Department of Health developed an excellent set of guidelines for the curriculum that were similar to the CDC guidelines published in 1988.[5] According to a phone conversation that I had with the coordinator of the program at the State Department of Education, educators have essentially ignored those guidelines. After an extensive review of school based programs to reduce sexual risk behaviors, Kirby, et al., under the auspices of the CDC published their findings in 1994 that revealed only four U.S. programs could demonstrate effectiveness in actually changing high risk behavior.[6]

The Interagency Coordinating Council for Prevention of Adolescent Pregnancy and Sexually Transmitted Disease was created by the 1994 State Legislature and their report was approved by the Joint Legislative Committee on November 27, 1995. That report simply repeated the same type of rhetoric and recommendations that had already been demonstrated to be ineffective by the CDC study. I contacted the only MD physician on the council, and he was unfamiliar with the information in Kirby's study. Is it any wonder that teenage sexual activity and the associated health problems have continued to sky-rocket in the ten years since the Legislature attempted to do something about the problem?

HB 1476, in 1987, required that "AIDS prevention education shall specifically teach students that:

1. engaging in homosexual activity, promiscuous sexual activity, intravenous drug use or contact with contaminated blood products is now known to be primarily responsible for contact with the AIDS virus;

2. avoiding the activities specified in paragraph 1 of this subsection is the only method of preventing the spread of the virus;

3. sexual intercourse, with or without condoms, with any person testing positive for human immunodeficiency virus (HIV) antibodies, or any other person infected with HIV, places that individual in a high risk category for developing AIDS."

Senate Bill 1180, passed in 1994, which created the Interagency Coordinating Council for Prevention of Adolescent Pregnancy and Sexually Transmitted Diseases specifically called for the council to develop a plan which would include "A statewide public awareness campaign which extols the virtue of abstaining from premarital sexual activity. Said public awareness campaign shall not directly or indirectly condone premarital or promiscuous sexual activity."

I think it is important that as the OCIHO launches into the arena of addressing teenage pregnancy rates in Oklahoma, they should be aware of the current Oklahoma statutes that deal with the issue of adolescent sexual activity. They should be aware of what has already been done, and more importantly, they should be aware of what has *not* been done, despite the clear message contained in legislation passed in 1987 and in 1994.

The OCIHO should review the CDC report prepared by Kirby, et al. and should consider reviewing one of the four programs that have demonstrated effectiveness. I recommend Dr. Marion Howard's program, "Postponing Sexual Involvement"[7] be considered. Dr. Howard routinely travels around the country helping communities implement her program. I am sure she could come and meet with the OCIHO to address this issue in detail.

Improving the state of the state's health is a worthy goal. It is a reachable goal, as well, as long as the OCIHO focuses on making decisions and recommendations based on accurate data rather than based on promoting a particular sociopolitical agenda.

—Glenn P. Dewberry, Jr., MD
Oklahoma City

References

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LETTERS (continued)

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3 The Heritage Foundation, "Perception vs Reality Taking a Second Look at Canadian Healthcare," Backgrounder, No. 807, Jan 31, 1991
4 Mark D "Use of medical resources and quality of life after acute myocardial infarction in Canada and the United States", *NEJM*, Vol. 331, No. 17, October 27, 1994
5 CDC "Guidelines for Effective School Health Education to Prevent the Spread of AIDS," *MMWR* Supplement, Jan 29, 1988, Vol. 37, No S-2
6 Kirby D "School-based programs to reduce sexual risk behaviors, a review of effectiveness," *Public Health Reports*, May-June, 1994, Vol 109, No. 3, p. 339-360
7 Howard M "Helping teenagers postpone sexual involvement." Family Planning Perspectives, Vol 22, No 1, Jan Feb 1990, p 21-26
8 Dewberry G "Reduction in heroin abuse in the Fulda military community" Medical Bulletin of the U.S. Army, Europe, Vol 37, No 5, May 1980, p. 19-21

■ **Robert M. Mahaffey, MD, Tulsa, was one of several mem**bers of the Broken Arrow Church of Christ who went on a medical mission to Belize, Central America, in July. The group took with theym som 20 plastic shipping crates packed with prescription medicines, first aid supplies, vitamins, and similar items, along with teaching materials. Medical and mission teams from other congregations will join the Broken Arrow team, creating a workforce of 30 individuals.

Dr. MaHaffey and his wife were members of a medical mission team to Africa in the early eighties. Since then, Dr. MaHaffey has gone on at least one such trip each year, to various countries.

■ **Randall W. Henthorn, MD, was one of three recipients** recently to share the 1997 Bertram E. Sears Award for Faculty Teaching. It was the first year for the award, established in honor of the late longtime physicians and faculty member of the Department of Anesthesiology of the University of Oklahoma College of Medicine.

At the same award ceremony, Dr. Robin L. Harms was a co-winner of the John L. Plewes Award for Outstanding Resident, and Dr. Purnima M. Shah was co-winner of the Chariman's Award for Faculty.

DEATHS

Benjamin Howard Gaston, MD
1926 - 1997

Benjamin H. Gaston, MD, a native of Harrison, Ark., died May 14, 1997. A longtime Muskogee surgeon, Dr. Gaston earned his medical degree from Johns Hopkins School of Medicine in 1949. He went on to complete his internship and residency at Bellevue Hospital in New York City. Dr. Gaston established his first practice in Oklahoma in 1958 after completing two years of active military service with the U.S. Army. He was a Life Member of the OSMA.

Edmond Herman Kalmon, Jr., MD
1915 - 1997

Longtime Oklahoma City radiologist Edmond H. Kalmon, Jr., MD, died June 24, 1997. Dr. Kalmon was born in Albany, Ga., and earned his medical degree at Vanderbilt University School of Medicine, Nashville, Tenn., in1940 He completed both his general and radiology residencies at Vanderbilt as well. Dr. Kalmon served in the U.S. Army Air Force from 1941 to 1946, attaining the rank of lieutenant colonel. He moved to Oklahoma City in 1950 to begin his career in diagnostic and therapeutic radiology at the Oklahoma City Clinic. He was chairman of the Presbyterian Hospital Department of Radiology for 33 years. When the new radiology wing at Presbyterian was dedicated in 1984, it was named the E.H. Kalmon, M.D., Radiation Therapy Facility in his honor. Dr. Kalmon went on to become a clinical professor of radiology at the University of Oklahoma Medical School.

(continued)

IN MEMORIAM

1996

Logan Albert Spann, MD	June 7
Coye Willard McClure, MD	June 19
James Jackson Gable, Jr., MD	July 8
Thomas McNeil Story, MD	July 9
Herschel Jerome Rubin, MD	July 12
John Andrew Graham, MD	July 20
Robert Douglas Anspaugh, MD	July 21
Robert Moran Herlihy, MD	July 24
Ralph Carrol Denny, MD	July
William Allen Heflin, MD	August 3
Bruce Hunter Brown, MD	August 4
Arnold Gordon Nelson, MD	August 26
Ollie Wayne Dehart, MD	August 28
Leslie Arvin Arneson	September 26
Bertram Edward Scar, MD	October 4
Walter Wicker, Jr., MD	October 11
Ellis Edwin Fair, MD	October 21
William Nathan Oxley, MD	October 22
Jesse Day Shipp, MD	October 28
William Manning Moore, MD	November 28
Charles Leonard Benson, MD	December 8
William Norris Harsha, MD	December 17
Ronald S. Barlow, MD	December 21

1997

Edward J. Tomsovic, MD	January 2
Ronald W. Gilchrist, Jr., MD	January 19
Kenneth Rex Scivally, MD	February 8
Hays Richman Yandell, MD	February 19
Robert Edward Pollnow, MD	March 2
Jess Hensley, MD	March 25
Vester Meade Rutherford, MD	April 7
George Rainey Williams, MD	April 20
Benjamin Howard Gaston, MD	May 14
Roy Lawrence Neel, MD	May 19
William Carl Lindstrom, MD	May 21
Joseph Sansted Henderson, MD	May 26
Charles Marion O'Leary, MD	June 22
Dale Gustaf Johnson, MD	June 24
Edmond Herman Kalmon, Jr., MD	June 24
Edward Leroy Koger, MD	June 30

Deaths *(continued)*

William Carl Lindstrom, MD
1910 - 1997

Retired Tulsa obstetrician-gynecologist W. Carl Lindstrom, MD, died May 21, 1997. The Ada native earned his doctor of medicine degree at the University of Oklahoma in 1934 and completed an internship at Evanston (Ill.) Hospital in 1936. He established his Tulsa practice in 1946 and retired in 1993, having delivered an estimated 11,000 babies in the area. A World War II veteran, Dr. Lindstrom served in the 82nd Airborne Division, attaining the rank of lieutenant colonel and earning a number of decorations. He was the first chief of staff at St. Francis Hospital in 1963 and was named Tulsa's doctor of the year in 1985.

Joseph Sansted Henderson, MD
1941 - 1997

Joseph S. Henderson, MD, Oklahoma City anesthesiologist, died May 26, 1997. Born in Omaha, Nebraska, he earned his undergraduate and medical degrees from the University of Nebraska, receiving his MD in 1966. After completing his residency training in anesthesiology in 1970, Dr. Henderson moved to Oklahoma City. He served two years in the U.S. Air Force while stationed at Tinker Air Force Base. Dr. Henderson was a board certified anesthesiologist and in the course of his career served on the staff of most major Oklahoma City hospitals.

Dale Gustaf Johnson, MD
1952 - 1997

Edmond resident Dale G. Johnson, MD, a family practice specialist with the Oklahoma City Clinic in Midwest City, died June 24, 1997. Dr. Johnson was born in Selkirk, Manitoba, Canada, in 1952 and earned his medical degree from the University of Manitoba Faculty of Medicine, Manitoba, Canada, in 1976. He completed his internship and residency at Manitoba Associated Teaching Hospitals and was board certified in family medicine. He also worked as a senior FAA medical examiner and was affiliated most of the hospitals in Oklahoma City. Dr. Johnson was a member of the Aerospace Medical Association, board of directors of the Civil Aviation Medical Association, American Association of Physicians and Surgeons, and American Academy of Family Practice. He also maintained his membership in several Canadian organizations. He was a member of the Civil Air Patrol, where he flew search and rescue.

Edward Leroy Koger, MD
1927 - 1997

Welch, Oklahoma, native Edward L. Koger, MD, died June 30, 1997, in Tulsa. He was 69. Dr. Koger was a board certified radiologist with Tulsa Radiology Associates. A 1956 graduate of Oklahoma State University, Dr. Koger earned his medical degree at the University of Oklahoma College of Medicine in 1960. His residency training was completed at St. Francis Hospital in Tulsa and at St. Paul Medical Center in Dallas.

Charles Marion O'Leary, MD
1909 - 1997

OSMA Life Member Charles M. O'Leary, MD, a native Oklahoman born in Nowata, died June 22, 1997. Dr. O'Leary, a longtime resident of Oklahoma City, was graduated from the University of Oklahoma School of Medicine in 1934. In addition to his practice of some 42 years, he was a clinical professor of surgery at his alma mater; chief of staff at St. Anthony Hospital in the late 1960s; founding member and president of the Oklahoma Clinical Society; founding member, treasurer, and president of the Southwest Surgical Association; and a member of the Fortune Club.

Classifieds

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- *Foster collaboration between AMA, AMWA, women physician specialty organizations, national women's health groups and other organizations with mutual concerns.*
- *Increase flexibility at all levels of the profession and assist physicians in balancing professional and family responsibilities.*
- *Provide a forum for mentoring, networking and ongoing communications for women physicians.*
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- *Increase the membership and participation of women physicians in their professional societies and the AMA.*

Membership is open to all AMA members -- women physicians, women medical students and all physicians interested in women's issues. There is no charge to join. Non-AMA members are welcome to join the Congress on a trial basis for one year.

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During Women In Medicine Month, we gratefully acknowledge the participation and support of all our female members. The AMA now has more women physicians than any other medical association. We encourage all female physicians, residents, and medical students to become members. So please, join now. Your patients' future rights and your entire profession depend on your commitment today.

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THE LAST WORD

■ **Jay A. Gregory, MD, chairman of OSMA's delegation** to the AMA, is calling for resolutions for the AMA Interim meeting scheduled for December 7-10, 1997, in Dallas, Texas. The OSMA delegation will review resolutions for content and existing policy before submitting them to the AMA. Resolutions need to be mailed to the OSMA office, attention: Jay A. Gregory, MD. OSMA members are encouraged to contact their AMA delegates or alternates regarding items they would like to have brought before the AMA House of Delegates. Contact Kathy Musson, OSMA acting executive director, if you would like to attend the Interim Meeting or have questions concerning resolutions.

■ **This month the *Journal* features an informative article** by Dr. Timothy A. Walker, Oklahoma City, a member of the newly formed Council on Publications, Communications, and Public Relations. Plans for the future include more such articles to provide readers with useful information on personal computers, their purchase, and their use in accessing the Internet and the OSMA's web site, *OSMA Online.*

■ **September is national Women in Medicine month. The** event spotlights women in their ever-increasing role in today's medical community. Even now the AMA is preparing for next year's inauguration of its first woman president, Dr. Nancy Dickey, and in Oklahoma, Dr. Mary Anne McCaffree will become the OSMA's first female president.

■ **The OSMA's annual *Legislative Summary,* special a 12-** page newsletter, was mailed earlier this month to all OSMA members. Watch for it, read it, and learn what OSMA's legislative team—Dr. Edward N. Brandt, Jr., and lobbyists Lynne White and Vickie Rankin—achieved at the State Capitol in this banner year. Included in the report is information on this summer's interim studies and details on how to contact lawmakers.

■ **The National Library of Medicine (NLM), a part of the** National Institutes of Health, launched on June 26 a new service to provide all Americans free access to MEDLINE—the world's most extensive collection of published medical information—over the Internet's World Wide Web. Previously, users have had to register and pay to search MEDLINE and other NLM databases. MEDLINE can be accessed at <http://www.nlm.nih.gov>. Among other benefits, MEDLINE may provide consumers with new ammunition for making managed care decisions. In its list of examples of how access to MEDLINE and other information from its library has "positively touched" lives, the NLM cited the case of a Connecticut librarian who searched MEDLINE for a doctor who was concerned about hospitals performing mastectomies on an outpatient basis for insurance purposes. Her search resulted in a reversal of such insurance policies.

"The National Library of Medicine's debut for free Web-based searching could not be more timely," said NLM Director Donald A.B. Lindberg, MD. "The health care delivery landscape is changing. Citizens are increasingly turning to the Web as a source of information to improve their daily lives, including their health. So, it is vital that they, and the health professionals who serve them, have access to the most current and credible medical information."

■ **Former OSMA Executive Director David Bickham, at** the AMA Annual Meeting in July, was presented a Distinguished Service Award for his 26 years of service to OSMA. The presentation was made before the AMA House of Delegates at their opening session. Bickham was nominated for the award by a national specialty society.

■ **If you have ever thought about running for public of-** fice, now is the time, and here is the place to start! The American Medical Association has a program designed for members of the medical community considering a run for elective office, or who have already been declared as a candidate. Learn from political experts how to make the decision to run, the secrets of effective fundraising, the role of the spouse and family, and how to become a better political speaker. Medicine's Candidate is a bi-partisan political/campaign training program designed for AMA members and their spouses who are considering a run for political office or who have filed to run for office. This program will be held November 14-16 at the Old Town Holiday Inn in Alexandria, Virginia, just outside of Washington, D.C. For members of the AMA and spouses who participate in the program, AMPAC will waive the registration fee, pay for two-night hotel accommodations at the Old Town Holiday Inn, and provide course materials and meals during the program. For more information or to register, call Michelle Johnson, 202-789-7472.

■ **James R. Wendelken, MD, Oklahoma City, was recent-** ly elected treasurer of the South Central Section of the American Urologic Association.

■ **Thomas C. Alexander, MD, has received a plaque from** Oklahoma State University at Okmulgee in recogniton of his service to student health and well-being. He dedicates several hours a day to student medical and health care, as did his father before him.

■ **Cheryl S. Black, MD, Oklahoma City, president of the** Oklahoma Chapter of the American Diabetes Association, says the recent statement from a Helsinki conference that diabetes is becoming "a truly golbal epidemic" comes as no surprise. "It's true and it's scary," she says, noting that in Oklahoma it is estimated some 200,000 people have the disease and half don't even know it. ▯

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EDITORIAL

Unanimous Supreme Court 355
R.V. McINTYRE, KINGFISHER

PRESIDENT'S PAGE

The White Coat Ceremony 357
D.M. SELBY, ENID

SCIENTIFIC

Acute Infectious Arthritis 359
H.A. STAFFORD, OKLAHOMA CITY

Ganciclovir Treatment of Systemic Cytomegalovirus in an Immunocompetent Host 367
J.S. LEMAN, T.W. TOALSON, C.G. WLODAVER; OKLAHOMA CITY

Studying Non-Hodgkin's Lymphoma in Two Oklahoma Counties: A Call for Centralized Cancer Data Management 370
E.S. BARTLETT, J.M. PONTIOUS; ENID

SPECIAL

Immunization of Health Care Workers with Varicella Vaccine . 376
AMA COUNCIL ON SCIENTIFIC AFFAIRS

Leaders in Medicine—
A.C. Lisle, Jr., MD: The Best of the Bunch 383
R. GREEN, OKLAHOMA CITY

The Lady of Windmere: A Short Story 392
R.R. EDDE, OKLAHOMA CITY

NEWS

White Coat Ceremony becomes newest tradition at OU, 407...New seat belt law says buckle up or get stopped and ticketed, 415

DEPARTMENTS

Health Department, 395... Poison Control Center, 412... OSMA Hassle Factor Log, 412... Deaths, 415... In Memoriam, 415... Classifieds, 415... Alliance, 423...The Last Word, 424



ABOUT THE COVER

This month the Journal features another of Oklahoma's Leaders in Medicine, Dr. A.C. Lisle, Jr., of Oklahoma City. Story begins on page 383.

Photograph by Robert Taylor. Art direction by Greg Gilpin, Graphic Arts Center, Oklahoma City.



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Unanimous Supreme Court

A phenomenon of our contemporary society is the frequent allegation of a "right" to this or that, when prior usage has labeled the activity as a privilege, a licence, or a prerogative. While these new "rights" may well be desirable attributes to obtain, the faddish overuse of the term "right" has trivialized the concept of right in speaking of our innate natural rights and of those rights formally granted by organized society. For example, when an advertiser says: "...you have a *right* to glasses that fit," this right is not the equal of "...the *right* to life, liberty, and the pursuit of happiness" expressed in the Declaration of Independence.

Some activists of our society have advanced the concept that certain patients under certain circumstances have the "right" to demand an assisted suicide from their physician, and this old debate has now entered a new era in our society. The United States Supreme Court has voted unanimously that state laws criminalizing physician-assisted suicide are legitimate and are to be upheld. Thus the Court rejects the dubious theory of a right to assisted suicide. We believe the Supreme Court to be correct.

In this context, it is notable that the physician's ability to prescribe and use potent and dangerous medicine in the dying patient is not circumscribed. However, the motivation in the usage is required to continue to be therapeutic. For the health of society, it is important that patient depression not take command of the therapeutic process, even when the patient is terminally ill. The conjunction of a depressed patient in pain and a physician with a masked depression is loaded with possibility for malevolent perversion of the caretaker function. Elemental justice proclaims that even the dying patient cannot command a treating physician to kill.

That assisted suicide advocates are able to rally a modicum of support in our society is an indirect signal that the medical profession is not doing very well in the care of many terminal patients. To die is forever a part of human life, and the physician and medical therapy play a crucial role in the quality of life of most people nearing their dying time. When the physician performs these final duties well, the patient's most difficult time is made tolerable, even though not cheerful. On the other hand, many emotion-laden questions may demand physician input during terminal medical care, and indifference or a bungled response may result in intense emotional suffering in the patient or patient's family.

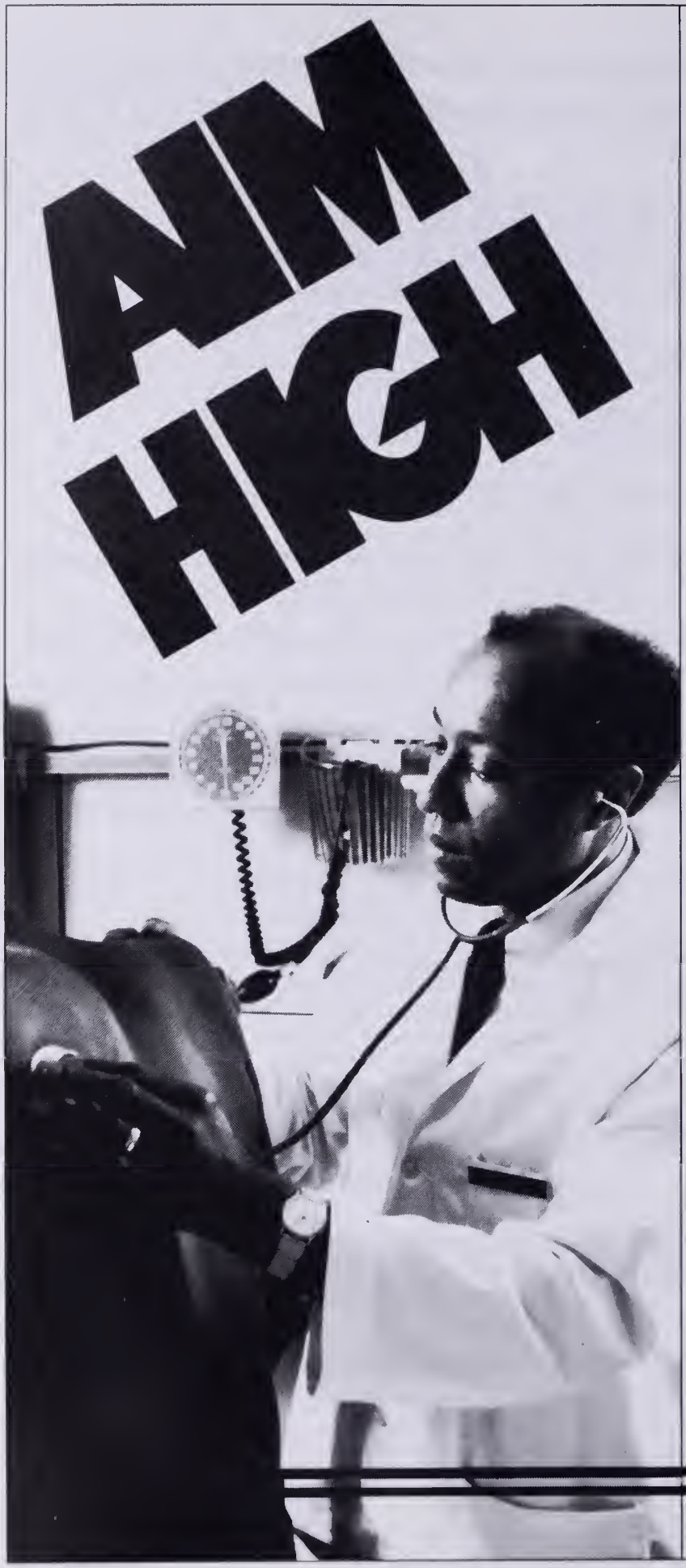
We physicians should see to it that the terminal patient's therapeutic options are selected in an open and honest manner that is consonant with the patient's own value system. We should be able to assure the dying that diagnosis and treatment are accurate and up to date. We must ensure that pain control and symptom suppression are determined by the patient's needs, and not by a remote impersonal bureaucrat. We must remain committed to be an emotional support to the dying until they are dead.

The United States Supreme Court explored numerous issues attendant to the assisted suicide debate, and we believe the overall effect of the decision will be culturally and practically acceptable to society. There is implied a tacit recognition that suicide does not require assistance in order to be accomplished. More importantly for the physician, this decision confirms a boundary to patient control of the physician.

A unanimous decision of the Supreme Court has given the medical profession a timely opportunity to improve our treatment of the dying patient.

Ray V. McIntyre, M.D.

An editorial is a column of personal opinion that may or may not reflect the official position of the OSMA.



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AIR FORCE

The White Coat Ceremony

On August 17, the University of Oklahoma College of Medicine held its first White Coat Ceremony for the members of its Class of 2001. As part of this new College of Medicine tradition, in which the students were ceremonially "cloaked" in their first white coats and took an Oath of Commitment to the profession, these young men and women were welcomed into the field of medicine by the leaders of the medical community.



I was pleased to have been asked to attend and speak as the representative of organized medicine in Oklahoma. I felt a great responsibility to impress upon these eager, ambitious young people the importance of organized medicine to the profession, to both their futures and ours.

On this auspicious occasion, my comments were as follows:

> Good afternoon. It is my privilege and honor to serve as president of the Oklahoma State Medical Association and to be here today to address the University of Oklahoma's College of Medicine Class of 2001.
>
> The Oklahoma State Medical Association was formed in 1906, months before statehood. Since that time, it has evolved into an association respected both locally and nationally. OSMA's Mission Statement sends a strong message to patients and physicians across the state:
>
> ***"To Promote the best health for the people of Oklahoma in a professional, ethical and compassionate manner by advocating for patients, representing physicians, and promoting the art and science of medicine."***
>
> The American Medical Association this year celebrates its 150th Anniversary, marking a rich and noble heritage beginning in 1847, and physicians across the nation have rededicated themselves to the ideals and ethics which have guided and transformed our profession.
>
> While the world around us has changed quite a bit since the days the AMA and the OSMA first began—our very core has not. A core committed to the ethics of medicine and meeting the needs of our patients. The best way to meet that commitment is by participation in organized medicine. Through their involvement in county medical societies, the OSMA, and the AMA, physicians in this state have continued to be an advocate for patients and physicians and provided an ally in our on-going battle to improve the health care system for the entire nation.
>
> Our agenda is ambitious. It has to be if it is to launch a revolution to restore the ethical balance in medicine and do all we can to help the physicians of America fulfill our historic duty to our patients. That's what organized medicine has been doing for 150 years and we plan to keep on doing it a lot longer—and we want you with us as we do it.
>
> Why should you join organized medicine? I feel this should be a command rather than a question. Upon entering the field of medicine, we enter into privileged lives and an obligation that we should give something back—both to our profession and to also our community—in exchange for that privileged life. This is the most challenging, the most exciting, the most rewarding profession there is; it is imperative this be continued. I challenge you today to become involved and share the privilege with me.
>
> I wish you much success now and in the future as you too become leaders for the medical profession.
>
> I would also like to take this opportunity to again invite the members of the Class of 2001 to the Oklahoma State Medical Association's Medical Student Picnic to be held next Thursday, August 21, beginning at 6:30 p.m. at the Omniplex Science Museum. This will give you an opportunity to begin your involvement by becoming members of the OSMA Medical Student Section.

In the aftermath of this important ceremony, reported in greater detail elsewhere in this JOURNAL, I urge each of you to think back to how you felt when you donned your first white coat and entered into our proud and privileged profession. Remember... and at every opportunity encourage our younger colleagues

to follow in our footsteps, united on behalf of the profession—for they, not we, are the real future of medicine.

On another note, at this time of year as we establish our 1998 budget, which approaches some $2 million, we should thank the chairpersons of our AMA delegation, Councils, Committees, and Sections for submitting their requested budget figures, which had not been previously done. Personally, I wish to thank our Secretary-Treasurer Carol B. Imes, MD, for her many hours of time in formulating and analyzing these figures for Board discussion and approval.

As to our Executive Director Search, your committee has reviewed curriculum vitaes with the Witt-Kiefer search firm and on October 5, 1997, interviews will be done and chosen candidates will be presented to the Board of Trustees for their anticipated selection on October 19.

Again, thank you for allowing me the privilege of serving as your president.

David M. Kelly, M.D.

Acute Infectious Arthritis

Haraldine A. Stafford, PhD, MD

Infectious arthritis is one of the few rheumatologic emergencies. Significant morbidity and mortality can occur if treatment is delayed. A high index of suspicion is required when a patient presents with an acute arthritis of one or several joints. Treatment, which is multifaceted, can prevent permanent joint dysfunction.

DEFINITIONS

Infectious arthritis is defined as inflammation in the joints caused by direct invasion and multiplication of infectious agents. The term *septic arthritis* is used when viable organisms are readily cultured from the joint, *aseptic arthritis* when they are not. In contrast, *reactive arthritis* is defined as inflammation in the joints mediated by an immunologic reaction to the infectious agents.

Infectious arthritis can be further subdivided by its presentation into acute and chronic forms. Acute infectious arthritis has a rapid onset with prominent symptoms and signs. Chronic infectious arthritis has an insidious onset with indolent symptoms and signs. This distinction between acute and chronic reflects the microbial agents that cause infectious arthritis. Acute infectious arthritis is caused by pyogenic bacteria, viruses, and spirochetes. Chronic infectious arthritis is caused by mycobacteria, fungi, parasites, and spirochetes.

The focus of this article is acute infectious arthritis, particularly bacterial arthritis. Viral and Lyme arthritis will be briefly discussed since they are frequently considered in the differential diagnosis of acute arthritis. Septic arthritis of prosthetic joints or chronic infectious arthritis will not be discussed.

ACUTE BACTERIAL ARTHRITIS

(for a more comprehensive review, see reference 1)

Epidemiology.– Little information is available regarding incidence or prevalence rates of acute bacterial arthritis since this is a relatively rare disease. One review of admission diagnoses over a five year period at several Veterans Affairs hospitals in Washington found an overall incidence of septic arthritis of 0.022%.[2] A study from New Zealand documented 27 cases of septic arthritis in 6700 admissions (0.4%).[3] Other investigators reported incidence rates of 0.005%.[4] The author's experience would suggest that rates are higher than this last value.

There are certain groups of patients in whom the prevalence of bacterial arthritis is higher. In a group of hospitalized hemodialysis patients, bacterial arthritis was listed as the cause of hospitalization in 2% of patients.[5] In patients with rheumatoid arthritis, the prevalence of bacterial arthritis has been estimated to be between 0.3–3% (rev. in reference 6). Usually these are patients with severe long-standing rheumatoid arthritis, that require immunosuppressives, prednisone and intraarticular injections.

From the Departments of Medicine, University of Oklahoma Health Sciences Center and Department of Veterans Affairs Medical Center, and Arthritis and Immunology Program, Oklahoma Medical Research Foundation.

Direct correspondence to Haraldine A. Stafford, PhD, MD, Oklahoma Medical Research Foundation, 825 Northeast 13th Street, Mail Stop #24, Oklahoma City, OK 73104.

Table 1. Bacterial Arthritis: Risk Factors

Phagocytic defects	
	Complement deficiencies
	Disorders of chemotoxis or introcellulor killing
Impaired defense mechanisms	
	Chronic severe illnesses
	Malignoncy
	Immunosuppressive drugs, glucocorticosteroids
	Hypogommoglobulinemio
Breakdown of the skin barrier	
	Introvenous drug use
	Puncture wounds
Violated joint integrity	
	Prosthetic joint surgery
	Chronic orthritis

Both sexes and all age groups are susceptible to infectious arthritis. In general, however, there is a male predominance. In the younger male group, this often occurs as a result of trauma or joint surgery. Infectious arthritis occurs in all age groups, but usually it is a disease of small children and the elderly.

Risk factors have been identified that predispose an individual to bacterial arthritis. There are factors related to the host's ability to clear an infection and factors related to the integrity of the joint (Table 1). These include phagocytic defects, impaired host defense mechanisms, direct penetration into the joint, and joint damage. Complement deficiencies, especially of the terminal components, increase an individual's risk of neisserial infections. Inherited disorders of chemotaxis or intracellular killing allow repeated infections with staphylococci and gram negative rods. Chronic diseases, e.g., malignancy, diabetes mellitus, alcoholism, end-stage renal disease and liver disease, alter the host's ability to clear infections through diverse mechanisms. The use of immunosuppressive drugs clearly influences the host's ability to eradicate an infection. Hypogammaglobulinemia leads to recurrent infections with encapsulated bacteria, particularly *Streptococcus pneumoniae* and *Haemophilus influenzae*. Intravenous drug use and puncture wounds eliminate the skin barrier to infection and allow a portal of entry for microbes. Joint damage secondary to surgery or chronic arthritis destroys the capillary integrity of the joint. Patients with rheumatoid arthritis, osteoarthritis and crystalline-induced arthritis are at risk for bacterial arthritis.

Pathogenesis/Pathophysiology.– Bacteria reach synovial membranes by various routes (rev. in reference 1), which include hematogenous dissemination from other sites of infection, spread from contiguous osteomyelitis or adjacent soft tissue infection, diagnostic or therapeutic invasion of the joint, and penetrating damage by puncture or laceration. Hematogenous dissemination is the most common route of joint inoculation. Commonly documented primary sites of infection include the lung, genitourinary tract, skin, heart valves, gall bladder, abdomen and pelvis. Spread from adjacent foci of osteomyelitis is especially common in children and patients with diabetes mellitus. Intraarticular injection has a purported risk of infectious sequelae of 1/1000–1/16000. Arthroscopy has a rate of infection of 0.04–0.3%, whereas the rate of infection associated with arthroplasty is 0.5–2% (rev. in reference 7).

Once bacteria are inoculated into a joint, a cascade of inflammatory events ensues. Neutrophils migrate to foci of bacteria and release inflammatory mediators and enzymes, which in turn increases synovial fluid within the joint. The resultant increase in joint pressure interferes with the vascular supply to the cartilage. In response to cytokines, synovial cells proliferate and granulation tissue invades cartilage and bone. Cartilage and then subchondral bone are destroyed by multiple mechanisms.

Experimentally induced bacterial arthritis in animals supports this pathogenic mechanism (rev. in reference 8). The early steps of bacterial arthritis are completed within 24-48 hours, and by 7 days there is irreversible cartilage destruction. Moreover, animals injected intraarticularly with components of certain bacteria, e.g., cell walls of gram positive organisms and lipopolysaccharide from gram negative microbes, can develop the same pathology.

Certain joint factors are postulated to promote bacterial invasion. The vascularity of the synovium, the presence of specific receptors for microbes, and an environment conducive to bacterial growth are probable susceptibility factors. The synovium is a highly vascular tissue without a basement membrane. Organisms pass through the synovium, and stay there because of specific receptors or a preferred environment. High endothelial venules trap mononuclear cells that may be harboring microbes. Several components of cartilage have been identified that bind to molecules from bacteria. An adhesin molecule has been identified in *Staphylococcus aureus* which is a collagen-binding protein.[9] Mice injected with a mutant strain of *S. aureus* lacking this molecule develop bacterial arthritis much less frequently than controls, 27% vs 70%. Certain strains of *S. aureus* also bind to Type I collagen.[10] Yersinia adheres to fibronectin in cartilage.[11] Certain environmental factors within the joint have been postulated to be conducive to bacterial growth. These include temperature and O_2 tension appropriate for a specific organism.

Nongonococcal Bacterial Arthritis.– A variety of bacteria can cause acute bacterial arthritis, which traditionally is divided into nongonococcal and gonococcal bacterial arthritis. Organisms that can cause nongonococcal arthritis include gram positive cocci, gram negative rods, spirochetes, and chlamydia and mycoplasma spe-

cies. Gram positive cocci (staphylococci, streptococci, and enterococci) are the most frequently cultured pathogens. Staphylococcal infections occur in approximately 60% of these cases and originate from skin and nares. *S. aureus* is the principal pathogen in native joints, whereas *S. epidermidis* is the major cause of prosthetic joint infections. Infections with these organisms may follow trauma and intraarticular injections, and are also commonly seen in patients with diabetes, rheumatoid arthritis, and end-stage renal disease on hemodialysis. Streptococci cause 15% to 20% of nongonococcal arthritis and usually disseminate from the respiratory tract. Most species of streptococci have been implicated. Group A ß-hemolytic streptococcal infections have the best prognosis. *S. pneumoniae* is seen less frequently now. Infections with groups B, C, and G streptococci have the least favorable prognosis and are particularly common in patients with diabetes. Viridans streptococci are pathogens in patients who have received human bites, have subacute bacterial endocarditis, or use intravenous drugs.

Gram negative rods are less frequently identified as etiologic agents in nongonococcal bacterial arthritis but are frequent pathogens in certain groups of individuals. They most commonly cause septic arthritis in children, the elderly, intravenous drug users, and the chronically ill. Septic arthritis frequently arises from genitourinary or abdominal/pelvic sources. Of anaerobes, Bacteroides species are the most common pathogens. Of aerobes and facultative anaerobes, *E. coli*, Haemophilus and Pseudomonas species are the most frequently identified pathogens. *E. coli* is the most common gram negative pathogen in the elderly, responsible for approximately 10% of their cases of septic arthritis. In contrast, Haemophilus species are the most common cause of gram negative septic arthritis in children. Pseudomonas species are frequent pathogens in septic arthritis identified in intravenous drug users.

Spirochetes can cause infectious bacterial arthritis. *Borrelia burgdorferi* is the etiologic agent in Lyme's disease. Lyme arthritis will be discussed in greater detail later. *Treponema pallidum*, the etiologic agent of syphilis, can also cause nongonococcal bacterial arthritis.

Other bacteria that are more difficult to culture can also cause acute nongonococcal bacterial arthritis. Chlamydia and mycoplasma, agents that usually cause reactive arthritis, can cause septic arthritis in the immunocompromised. Fastidious oral flora are beginning to be seen more frequently as joint pathogens. Infectious arthritis with these organisms occur in the setting of human bites and intravenous drug abuse. These organisms require special growth conditions, e.g., longer incubation periods and inoculation of synovial fluid into blood culture bottles.

Table 2. Bacterial Arthritis: Differential Diagnosis

Nongonococcal	Gonococcal
Crystal-induced arthritis	Viral arthritis (rubella, hepatitis B)
Trauma-induced arthropathy	Rheumatic fever
Osteoarthritis	Palyarticlar bacterial arthritis
Viral arthritis	Subacute bacterial endacarditis
Lyme arthritis	Systemic rheumatic diseases (SLE, Reiter's, JRA)
Malignancy-related arthritis	
Systemic autaimmune arthritis	

Clinical Features. Certain clinical features aide in the diagnosis of nongonococcal bacterial arthritis. This type of bacterial arthritis usually develops in the young or the old, or in a susceptible individual. Eighty to 90% of patients present with severe acute arthritis of a single joint, in conjunction with fever and clinical features of a primary infection elsewhere. However, in the elderly and chronically ill, these clinical features can be muted.

Acute nongonococcal bacterial arthritis has a predilection for certain joints, particularly those of the lower extremity; however, all joints can be infected. Infection of the fibrocartilaginous joints, i.e., sacroiliac, acromioclavicular and sternoclavicular, and vertebral discs, is observed especially in intravenous drug users.

Differential Diagnosis. The differential diagnosis for acute nongonococcal bacterial arthritis is broad (Table 2), and includes the causes of acute mono- or pauciarthritis (arthritis of one or several joints). Crystal-induced arthritis is probably the greatest mimic of septic arthritis. However, traumatic arthritis, osteoarthritis, malignancy and systemic autoimmune diseases are other common diagnoses to consider.

Laboratory Features. The most important diagnostic tests are those obtained on the synovial fluid. The total leukocyte count is usually greater than 50,000 with more than 90% neutrophils. Gram stain is positive for organisms in 50% to 75% of infections, particularly in infections with gram positive cocci. Cultures are positive in greater than 90% of infections. Cultures can be negative for fastidious organisms and in partially-treated patients. Countercurrent immunoelectrophoresis can sometimes identify organisms in partially treated cases.

Other laboratory tests are frequently abnormal.

Table 3. Bacterial Arthritis: Goals of therapy
Sterilize joint within severol doys
Decrease synoviol fluid WBC by >25% within 1 week
Restore function

The ESR and CRP are almost always elevated. Peripheral WBC is elevated in 50% of the cases, but may be only mildly elevated. In immunosuppressed patients, the peripheral WBC may be normal. Blood cultures are positive in approximately 50% of cases.

Consequently, these tests are not helpful in excluding a diagnosis of acute septic arthritis.

Radiographs of the affected joint(s) are usually obtained to establish a baseline and to eliminate the possibility of contiguous osteomyelitis. They are normal early in the course of infection (less than one week), or show only soft tissue swelling and effusion. At 1 to 2 weeks, periarticular osteopenia may be observed. At later dates (greater than two weeks), erosions and joint space narrowing may be observed.

Treatment. Early and aggressive management is the key to preventing functional impairment of the affected joint. Treatment is multi-faceted and consists of antibiotics, drainage and physical therapy. Patients whose treatment is initiated within 48 hours of symptom onset have the best prognosis, whereas those whose treatment is started after 7 days fare poorly.[12] Consequently, empirical antibiotic therapy is mandated until culture results are obtained. The choice of empirical therapy should depend on results of synovial fluid gram stain and the patient's clinical presentation. For example, an intravenous drug user might be treated for *S. aureus* and Pseudomonas infection. A dialysis patient with shoulder arthritis in the ipsilateral arm to his/her AV fistula should probably be empirically treated for methicillin-resistant *S. aureus*.

Once culture results are known, therapy should be tailored to those results. The duration of therapy depends on the pathogen and the clinical response of the patient. The following guidelines are recommended; there are no studies documenting efficacy of any given regimen. Intravenous therapy is usually indicated for 1 to 2 weeks. Oral therapy is then given to complete a total of 4 to 6 weeks of therapy.

Antibiotics alone are insufficient to treat nongonococcal bacterial arthritis. Repeated drainage of the affected joint is required. The rationale for drainage is twofold. It is necessary to remove the agents propagating the inflammatory response and destroying the cartilage and bone, i.e., neutrophils, necrotic material and enzymes. Moreover, increased synovial fluid should be removed to relieve pressure on cartilage. The efficacy of repeated drainage was demonstrated by Bayer.[13] Twelve patients with arthritis from gram negative rods were studied. Four of the six patients failed therapy when antibiotics were used alone. In contrast, only one of the six patients failed therapy when needle drainage was added.

There are four drainage modalities: repeated percutaneous needle aspiration, tidal lavage, surgical arthrotomy and drainage, and arthroscopic drainage and irrigation. Needle aspirations should be performed daily or more frequently as needed. The goal is to remove all the fluid with each aspiration. Advantages of this procedure include the avoidance of surgery risks or complications, and the relative ease of performance. Disadvantages are the frequency with which it needs to be done, and the inability to remove loculated fluid. The existence of loculated fluid is surmised if after needle drainage, fluid is still present in the joint and if an aspiration at an alternate site yields synovial fluid with a different leukocyte count. Tidal lavage consists of instillation within the joint of 20–80 ml saline repeatedly to a total volume of one liter. This procedure more effectively removes inflammatory mediators and breaks up adhesions. In eleven cases of septic arthritis of the knee that failed medical therapy, four patients responded to this treatment.[14] Disadvantages of tidal lavage include the slowness and awkwardness of the procedure. Surgical arthrotomy and drainage allows direct visualization of the joint. Consequently, infected and necrotic tissue are readily debrided and a drain can be inserted such that no additional closed procedures are necessary. Disadvantages include the complications of anesthesia, the requirement for healing of an arthrotomy, prolonged rehabilitation, and the potential for superinfection of an open wound. Arthroscopic drainage and irrigation has advantages similar to the open procedures and also requires smaller incisions, local anesthesia, and less rehabilitation time. Disadvantages include cost, the requirement for an operating room and a persistent risk of morbidity.

There has been a continuing debate between the medical and surgical communities regarding the best drainage modality. Unfortunately, there are no prospective studies available to address this issue and the prospects for doing such a study are not good. Broy and Schmidt[15] predicted that a ten-year multi-center trial would be required to detect a 20% difference in success rate between the two procedures. Retrospective studies have

shown that medical therapy is not any worse than surgical therapy, and may be superior. Goldenberg in 1975[16] reported outcomes of acute septic arthritis in 59 patients with regards to drainage modality. A poor outcome was defined as residual joint disease, persistent infection in the joint or surrounding bone, or death. This was a retrospective review of patients that were hospitalized on either the medical or surgical services. All patients had positive synovial fluid cultures and were treated within 14 days of symptoms. Causative organisms were similarly distributed between those treated medically and those treated surgically. Patients treated medically had a better outcome than those treated surgically, but the difference was not statistically significant. When analyzed by outcome of the joint rather than patient outcome, a significant difference was achieved. A meta-analysis of 300 studies comparing treatment in 371 joint infections in 336 patients over 25 years confirmed these findings.[15]

An additional aspect of treatment is early mobilization of the affected joint(s). The rationale here is to provide adequate nutrition to the joint, and prevent flexion contractures and adhesions in the joint. Early studies on post-operative joints showed that joints treated with prolonged immobilization required manipulation under anesthesia to regain mobility.[17] Rabbit studies confirmed these findings.[18] Continuous passive range-of-motion has proven to be the best mobilization modality. At presentation, it is acceptable to splint the affected joint(s) to prevent flexion contractures, and relieve pain. It is not advisable to use a cast for this purpose for several reasons. It would be difficult to assess the treatment response and impossible to repeatedly aspirate a casted joint. Weight-bearing should be prevented until all signs of inflammation are resolved. However, passive range-of-motion therapy and isometric strengthening should be begun as soon as the pain decreases.

There are definitely times when medical therapy will be suboptimal and surgery is indicated. Septic arthritis sometimes occurs in a problematic joint. Due to their deep location, the hips and shoulders are joints that are difficult to adequately drain. Certain joints may be difficult to drain secondary to altered anatomy from trauma or chronic arthritis. Adhesions and loculation of fluid prevent an affected joint from being adequately drained percutaneously. Coexisting osteomyelitis, the presence of a prosthetic joint, and a joint that has failed medical treatment are indications for surgical intervention. Evidence of failed medical therapy includes persistent culture positivity or elevated leukocyte counts or reaccumulation of synovial fluid despite appropriate medical therapy (Table 3 for goals of therapy).

Gonococcal Arthritis (for more comprehensive review, see reference 19).— ***Epidemiology.*** Gonococcal arthritis usually occurs in sexually active teenagers and young adults, but it can occur in sexually active older individuals as well. It occurs more frequently in females, especially after menses, during pregnancy, or in the postpartum period. Typically, arthritis develops days to months after an asymptomatic gonorrheal genitourinary tract infection.

Clinical and Laboratory Features. Gonococcal arthritis occurs in two forms: as part of disseminated infection or as a localized, suppurative arthritis. The disseminated form is more common with a prevalence of 0.5% to 3.0%. Prominent extraarticular manifestations include asymptomatic dermatitis, low-grade fever, tenosynovitis of the wrists, fingers, ankles, or toes. Joint involvement consists of migratory polyarticular arthralgias and arthritis. Synovial effusions are scant and typically culture negative. Blood cultures may be positive (less than 50%) if obtained very early in the course of infection, but usually are negative by the time the patient comes to medical attention. Suppurative arthritis occurs most commonly in a single joint later in the course of disease, but can occur in several joints. Knees, wrists and ankles are common sites of infection. Fewer extraarticular manifestations are observed. Synovial effusions are purulent, and cultures are positive approximately 25% to 30% of the time. Blood cultures are usually negative.

Differential Diagnosis. The differential diagnosis for disseminated gonococcal arthritis is generally different than that for nongonococcal bacterial arthritis due to its polyarticular involvement (Table 2). Diagnoses to exclude include viral arthritis (rubella, hepatitis B), acute rheumatic fever, systemic rheumatic diseases (systemic lupus erythematosus, Reiter's syndrome, juvenile rheumatoid arthritis), polyarticular bacterial arthritis, and subacute bacterial endocarditis. The differential diagnosis for the suppurative form is similar to nongonococcal bacterial arthritis.

Diagnostic Criteria. The diagnosis of gonococcal arthritis is made by the typical clinical presentation and identification of the organism at appropriate sites. For normally sterile sites, i.e., skin lesions, blood or synovial fluid, either a positive culture or gram stain is sufficient to identify the organism. If these are negative, then positive cultures at mucosal sites (e.g., cervix, urethra) will satisfy diagnostic criteria.

Treatment. For both forms of gonococcal arthritis, parenteral antibiotics are initially used. Due to the increase in penicillin resistance,[20] ceftriaxone or spectinomycin for penicillin-allergic individuals are the drugs of choice. These antibiotics are given parenterally until the patient is clinically improved (typically within several days). Once the drug sensitivity is known, a switch to the appropriate antibiotic should be made. Oral antibiotics are given to complete a 7-day course for disseminated gonococcal infection, and as needed for suppurative arthritis. Most experts recommend treating for coexistent chlamydial infection. Needle drainage as described for nongonococcal arthritis is recommended for suppurative gonococcal arthritis.

Prognosis for Acute Bacterial Arthritis.— The prognosis for septic arthritis largely depends on the virulence of the pathogen. The prognosis is excellent in gonococcal arthritis and variable in nongonococcal arthritis. The best outcomes are described with group A streptococcal and pneumococcal arthritis (70% to 85% have full recovery). The worst outcomes occur with anaerobic and polymicrobial infections. Intermediate outcomes are seen with staphylococcal and gram-negative bacillary arthritis (approximately 50% have full recovery).

There are other factors that affect prognosis (Table 4). Certain host factors, e.g., age, comorbidities, and concomitant medications are important in determining outcome. Joint factors, e.g., the joint's premorbid state and location, are important in prognosis. Most important is the rapidity of treatment.

The complications of acute bacterial arthritis can be both local and systemic. Local extension of infection to bone or adjacent soft tissues can occur. Joint function can be lost leading to permanent disability. Sepsis can occur with concomitant morbidity and mortality. The prevalence of complications is variable and depends on both host and pathogen. Vincent et al.[21] studied complications in 21 patients greater than 60 years old. In this cohort, osteomyelitis occurred in 38%, secondary osteoarthritis in 14%, and death from sepsis in 19%. This study confirms that septic arthritis has a poor prognosis in the elderly. From this and other studies, one can conclude that septic arthritis is a serious disease with significant morbidity including permanent joint damage and death.

Table 4. Bacterial Arthritis: Poor prognostic factors

Age > 60 years
Preexisting arthritis, especially rheumatoid arthritis
Infection in hip and shoulder
Treatment delay > 1 week
Polyarticular involvement
Persistently positive culture after 7 days of appropriate treatment

VIRAL ARTHRITIS

(for a concise review, see reference 22)

Clinical Features.— There are some general tenets. Viral arthritis usually occurs during the prodrome or onset of illness. A rash often accompanies the arthritis. The arthritis is usually polyarticular, arises acutely, is short-lived, and uncommonly recurs. The diagnosis of viral arthritis is made by clinical presentation and confirmatory serologies. Examples of viral arthritis that may commonly be seen in a generalist's office are presented.

Arthritis associated with rubella can occur with natural infection and after vaccination (in approximately 15% of vaccinated individuals). Females are primarily affected. Arthralgia and/or arthritis develop in 30% to 50% of infected adults usually within one week of onset of the characteristic maculopapular rash. Joint involvement is usually asymmetric, and involves the fingers, wrists, and knees. Joint complaints usually resolve within one month and are not associated with any sequelae.

Arthritis associated with parvovirus infection occurs in the spring and can occur in epidemics. Parvovirus infection commonly occurs in children and is transmitted by nasal secretions. Arthritis occurs in approximately 50% of infected adults with a female predominance. There is symmetrical involvement of the joints of the fingers, wrists, and knees. The characteristic rash (slapped cheeks) is less common in adults. The arthritis is usually self-limiting but occasionally persists as a chronic arthritis.

Arthritis associated with hepatitis B infection has an equal sex prevalence, occurs in approximately 33% of infected patients, and involves small joints of the hands and feet symmetrically. Arthritis has an acute onset and lasts days to weeks. The associated rash is urticarial or maculopapular. There is often evidence of other organ system involvement, e.g., abnormal liver function tests and glomerulonephritis. There are no arthritic sequelae unless the patient develops vasculitis.

Pathogenesis.— There are three putative mechanisms that explain how viruses cause arthritis. These include direct infection of synovial tissue, viral infection of immune cells, and immune complex formation. Direct infection of synovial cells can result in lysis either directly or

via cytotoxic immune cells. Viral infection of immune cells can result in viral persistence, modification of the immune response, deletion of certain cell populations, breaking of tolerance and development of autoimmunity. Immune complex formation can lead to vasculitis and synovitis. The clinical consequence of these pathogenic mechanisms is arthralgia or arthritis.

LYME ARTHRITIS

(for a more comprehensive review, see reference 23)

Clinical Features. — Lyme arthritis is a part of a multi-system disease that also affects the nervous system and heart. The arthritis is usually mono- or oligoarticular, and affects large joints. The disease can be divided into stages. In the early stage, migratory arthralgias predominate. With disseminated infection, intermittent arthritis develops and persists for weeks in approximately 60% of patients. The late stage is characterized by chronic arthritis that is defined as continual arthritis for greater than one year.

Diagnostic Criteria.— The diagnosis of Lyme arthritis requires the typical clinical presentation, exposure of the individual in a known endemic area (Northeast, North Central and Pacific Northwest), and positive serologies. The known endemic area must have a habitat suitable for deer, which are reservoir for the tick vectors. The serologies are used to confirm suspected cases. IgM antibodies to flagellar antigens arise within several weeks after infection. IgG antibodies develop later, first to flagellar antigens and then to the outer surface proteins.

The early antibodies are identified by enzyme-linked immunosorbent assays (ELISA) or immunofluorescent assays (IFA). Positive results on these tests need to be confirmed by immunoblot; they have a high false-positive rate. Patients remain seropositive for many years despite appropriate treatment, therefore, antibodies alone are not sufficient to make the diagnosis of Lyme arthritis. Paired serum samples showing an increase in antibody titers over time are the most useful diagnostically.

Treatment.— The treatment for Lyme arthritis consists of appropriate antibiotics and anti-inflammatory medications. Doxycycline 100 mg bid for 2 to 4 weeks is the preferred therapy. For children and pregnant females, amoxicillin and probenecid can be used. If persistent arthritis is present, ceftriaxone 2 gm intravenously daily for 2 to 4 weeks is recommended. Anti-inflammatory medications (primarily nonsteroidal anti-inflammatory medications) are used for symptom control.

REVIEW

Evaluation of Suspected Acute Infectious Arthritis. — When a patient presents with acute arthritis, a variety of diagnostic possibilities should be entertained. However, the most life-threatening and functionally disabling diagnosis must be eliminated first. Therefore, a high index of suspicion for infectious arthritis is required. The evaluation has several key components (Table 5). A thorough history and physical exam are necessary to detect associated symptoms and signs. Exposure to other individuals with infectious diseases, life styles and sexual practices, comorbid conditions, and medication use are key elements of the history.

Procuring synovial fluid is essential for making the diagnosis of acute bacterial arthritis. Synovial fluid analysis should include a total leukocyte count with differential, crystal analysis, gram stain, and culture (aerobic and anaerobic). For best results, synovial fluid should be transported to the microbiology laboratory immediately, and plated on broth and solid media. (Neisseria are fastidious organisms that require prompt culturing!) Synovial fluid should be inoculated into blood culture bottles at the time of aspiration if there is a suspicion of a pretreated infection or an infection with a fastidious organism.

Other laboratory studies will depend on initial suspicions. It is reasonable to obtain a CBC and ESR. Cultures of blood and other potential sites of infection should usually be obtained. If suspicions are high for gonorrhea, samples from other mucosal sites, e.g., the pharynx, rectum, and genitourinary tract should be cultured on Thayer-Martin medium.

Baseline x-rays should be obtained to eliminate the possibility of osteomyelitis. Other imaging studies should be ordered as necessary, especially to evaluate problematic joints.

Empirical Antibiotic Therapy.— There are certain guidelines that aid in the choice of empirical antibiotic therapy. Results of the synovial fluid gram stain, clinical setting and presence of infection elsewhere can guide therapy. A bactericidal regimen is usually preferable, as is a regimen appropriate for possible antibiotic resistance.

Table 5. Evaluation of suspected infectious arthritis

Thorough history and physical exam
Synovial fluid analysis
CBC, ESR
Cultures of blood and other potential sites of infection
Baseline x-ray, other imaging studies as necessary

Once culture results are available, that information should guide refinement of the regimen.

For a more in-depth discussion on acute infectious arthritis, readers are referred to two excellent recent reviews (references 1 and 24). ☐

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Ganciclovir Treatment of Systemic Cytomegalovirus in an Immunocompetent Host

Jeffrey S. Leman, MD; Thomas W. Toalson, MD; Clifford G. Wladaver, MD

Cytomegalavirus (CMV) infects a significant number of atherwise healthy individuals. Although most cases are subclinical and therefore not diagnosed, some patients present with a mononucleosis-type illness. Ganciclavir, an agent effective against CMV, has primarily been studied far use in immunocompromised patients. No formal studies have been done in immunocompetent individuals.

We report a case af an otherwise healthy adult female with severe heterophile negative infectiaus monanucleasis. Her symptoms included high fever, malaise, myalgias, caugh, and abdominal pain. Wark-up revealed an acute CMV infection. Intravenous ganciclavir was given with dramatic clinical and labaratary impravement.

Cytomegalovirus (CMV) infects a large portion of the population, with its clinical manifestations differing depending on the host's immune status and age.[1-3] Children will usually be asymptomatic. Adults may manifest a mononucleosis-type illness.[1,3] Severe disease is most often found in immunocompromised individuals, such as AIDS and organ transplant patients. Ganciclovir has been used successfully to treat CMV infections in immunocompromised patients.[1,2] Experience with the use of ganciclovir in immune competent individuals, however, is limited. We report a case of symptomatic CMV infection in an otherwise healthy adult who was treated successfully with ganciclovir.

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Case Report

A previously healthy 31-year-old white female presented to the hospital with a 14-day history of fever, malaise, myalgias, and cough. Three days earlier she began treatment with erythromycin for these symptoms but had not improved. She was also experiencing mild upper abdominal pain and nausea. The exposure and epidemiologic history failed to identify a cause for this syndrome.

Physical examination revealed an ill-appearing female with a 103°F temperature. She had a faint malar flush. On the anterior neck she had an erythematous macular rash with distinct irregular borders and central clearing. A grade II/VI systolic heart murmur was heard over the left lower sternal border. Abdominal examination revealed mild epigastric tenderness, a palpable spleen, and an 18-20 cm. liver to percussion. She had no lymphadenopathy.

The patient's initial white blood cell count was 8.9 k/cmm with 39% neutrophils, 36% lymphocytes, 20% monocytes, and 2% basophils. On the second hospital day, she had a 5% atypical lymphocytosis. Her total bilirubin was 1.6 mg/dl (0.2-1.5), direct bilirubin 0.9 mg/dl (0.1-0.4), alkaline phosphatase 288 U/L (30-115), GGTP 300 U/L (8-78), AST-SGOT 470 U/L (8-39), ALT-SGPT 524 U/L (9-52), and LDH 844 U/L (90-225) (Table 1). Serology for hepatitis A, B, and C was negative. A Monospot® test for heterophile antibodies was also negative. An Epstein-Barr virus

(EBV) IgM titer was positive at 1:160. An EBV early antigen was negative. The patient had an equivocal *Borrelia burgdorferi* titer. A chest x-ray was normal. An abdominal ultrasound showed hepatosplenomegaly.

CMV blood antigen was detected in four of 200,000 white blood cells. A CMV lgM enzyme immunoassay was positive at 2.63 (Table 1). CMV IgG enzyme immunoassay was equivocal. A throat culture for CMV was positive. Blood and urine cultures for CMV were negative.

Due to the above findings, we felt the patient had an acute CMV infection. Because of the continued severity of her symptoms, intravenous ganciclovir was initiated on the fifth hospital day at a dose of 5 mg/kg every 12 hours. Two days later, she had improved significantly. Her temperature had decreased, and her abdominal pain had resolved. The elevated hepatic transaminases also improved. Following five days of intravenous therapy, she was discharged home. She was continued on oral ganciclovir at a dose of 1000 mg every six hours for three days.

Following hospital discharge, the patient was seen biweekly for eight weeks and then sporadically for one year. She remained fatigued but showed general improvement. When retested four weeks after the initiation of therapy, the CMV antigenemia had cleared. The CMV lgM titer decreased, and the CMV lgG titer increased (Table 1). Two months later, the EBV titers remained unchanged. Twelve months after the acute illness, the patient continued to note some residual fatigue, especially with exertion.

Discussion

In this patient, the diagnosis of an acute CMV infection was made by the clinical picture of nonspecific fever and malaise, atypical lymphocytosis, NANBNC hepatitis, and laboratory evidence for acute CMV infection (isolation from a throat culture, antigenemia, and IgM seropositivity). Her clinical improvement and the normalization of laboratory values following ganciclovir treatment further supports the diagnosis.

CMV infection usually occurs asymptomatically at an early age, imparting life-long immunity. The infection can reactivate if a person becomes immunocompromised.[1] If primary infection occurs as an adult, it may cause a mononucleosis-like syndrome. It is referred to as EBV negative, or heterophile antibody negative, infectious mononucleosis (IM).[2,3] CMV accounts for 10% to 20% of all mononucleosis-like syndromes.[4] EBV is heterophile antibody positive and is the most common cause of IM. Additional differences between CMV and EBV IM include mean age of onset and duration of fever. Whereas EBV IM has a mean age of onset of 15 to 19 years, CMV IM has a mean age of onset of 29 years.[2] Furthermore, the fever with CMV IM averages 7 to 10 days longer than the fever with EBV IM.[4]

The clinical features of CMV IM include fever, malaise, arthralgias, arthritis, and lymphadenopathy.[3,4] Although this nonspecific syndrome will usually resolve spontaneously in two to three weeks, relapses may occur. Relapses are especially common with injudicious physical exertion during recovery.[6]

Maculopapular rashes, pneumonia, pneumonitis, myocarditis, retinitis, hemolytic anemia, and thrombocytopenia have all been reported in immunocompetent CMV infected patients.[3,4,6] Infected people may present with liver pain, but jaundice is uncommon.[3] Other gastrointestinal findings include gastric ulcers and colitis.[3-5]

Ninety percent of people with CMV IM have elevated hepatic transaminases. This elevation is rarely greater than three times normal.[3,4,6] Our patient had atypically high levels. The white blood cell count is usually normal or low. Atypical lymphocytes are common, but may not be present early in the disease.[3,4]

Therapy for CMV IM primarily includes rest and adequate nutrition.[4,6] Recently, ganciclovir has been used successfully in organ transplant and AIDS patients with CMV infection. Studies using ganciclovir in such populations have shown significant benefit in patients with retinitis, gastrointestinal involvement, and pneumonia.[3,5] The main limitation in using ganciclovir has been the development of neutropenia.[5]

Table 1. Acute and Convalescent Laboratory Values

Laboratory Test	Acute Value	Convalescent Value (one month after treatment)
WBC (3.7-11.6 k/cumm)	8.9	11.0
Atypical Lymphocytes	5%	None
Total Bilirubin (0.2-1.5 mg/dl)	1.6	0.8
Alkaline Phosphatase (30-115 U/L)	288	131
LDH (90-225 U/L)	844	223
AST-SGOT (8-39 U/L)	470	66
ALT-SGPT (9-52 U/L)	524	115
GGTP (8-78 U/L)	300	136
EBV IgM	1:160	1:80
EBV Early Antigen	1:16	1:16
EBV IgG	1:256	1:256
CMV IgM	2:63 (positive)	1.86 (pasitive)
CMV IgG	5 (equivocal)	22 (pasitive)
CMV Blaod Antigen	4/200,000 WBC	none

Since CMV disease in an immune competent adult is rare and usually self-limited, no formal studies have been done using ganciclovir in this population. Nonetheless, a few case reports have described successful treatment of such individuals with ganciclovir.[7,9,10,12,13] Ours can be added to the list.

In summary, this case report describes an otherwise healthy woman with primary CMV infectious mononucleosis. The prolonged severity of her clinical symptoms led to our decision to begin treatment with ganciclovir. While ganciclovir is being used extensively to treat infected HIV and organ transplant patients, our case suggests possible efficacy in selected immunocompetent hosts as well.

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Studying Non-Hodgkin's Lymphoma in Two Oklahoma Counties: A Call for Centralized Cancer Data Management

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Anecdotal evidence for an increased incidence of non-Hodgkin's lymphoma (NHL) had been informally discussed within several clinical practices in north central Oklahoma. This study was conducted to determine the incidence rates of NHL in Garfield and Kingfisher counties and to evaluate whether these counties represented unique cancer clusters. Data were collected from medical records and tumor registries in 22 area hospitals between 1990-1994. The annual incidence rate per 100,000 persons for Garfield county was 15.51 (95% CI: 10.9-20.1), and for Kingfisher county, 24.22 (95% CI: 12.4-36.1). Both of these rates are increased from the national incidence rate of 13.7 cases of NHL per 100,000 persons, suggesting a significant clinical impact. However, a statistical significance was not detected given the conservative methodology and the small populations involved. The difficulties of performing community-based research, the need for epidemiological studies to reduce clinical experience bias, and the need for centralized cancer data management are discussed.

Experiential knowledge is inherently populated with bias. This is especially poignant to the practicing clinician whose experience is influenced by recognizable factors such as geography, patient population and memorable outcomes, as well as numerous unrecognizable factors. Therefore, it is reasonable to suggest that in clinical practice there is often great bias concerning the incidence of rare events. This is especially true when dealing with cancer incidence, where even by combining such rare events into a computer database in hospital tumor registries, there continues to be errors in the estimations of the true incidence rates. The difficulty with this paradigm is that many of these incidence biases are incorporated into the clinical decision making of physicians.

Anecdotal evidence for an increased incidence of non-Hodgkin's lymphoma (NHL) in several of the clinical practices in north central Oklahoma had been informally discussed within the community. This study was designed to specifically document the incidence of NHL in Garfield county, with a comparative study of Kingfisher county, for the five-year period from January 1, 1990, through December 31, 1994.

This study provided the initial framework in an effort to evaluate whether or not Garfield and Kingfisher counties represent unique cancer clusters of NHL in the state of Oklahoma. The specific requirements for a "unique cancer cluster" for NHL are undefined in the literature and was thus defined by this research as any county within the state whose four-year averaged incidence rate and 95% confidence interval is greater than the 1989 national average of 13.7 cases per 100,000 persons.[1] Currently there is not any centrally-compiled data to estimate the incidence rate of NHL in Oklahoma.

Background

Over the past few decades, epidemiological data

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has shown a steady increase in both the incidence rates and the mortality rates for all types of Non-Hodgkin's Lymphomas (NHL).[1-4] Between the years of 1973 and 1989, the incidence of NHL has increased 60 percent in the United States —making NHL one of the largest increases of any cancer.[2] Studies have approximated that in 1993, some 43,000 new cases were diagnosed in the US and within the same year, 20,000 deaths could be attributed to NHL.[2] To demonstrate the dramatic increase in incidence, in 1950, the annual incidence rate of NHL per 100,000 was 5.9, while 1989 figures reported a rate of 13.7.[2]

Studies have indicated that the overall incidence of NHL can not be attributed to a sudden increase in birth cohorts or specific year of diagnosis.[1] This increase has affected all age groups except the very young, with the largest increase in incidence being observed in the elderly.[1-3,5] Some studies have indicated that incidence rates and their trends are comparable between both males and females, as well as between blacks and whites.[2] However, other studies have indicated that the incidence rate of NHL is much higher in white men (17.4/100,000 person years in 1984-1988).[4] Demographic data has also shown that the most rapid increase in incidence has occurred within rural areas.[1,2,6,7]

Multiple reasons have been cited in an effort to explain the increased incidence of NHL. Among the possible explanations include: improvements in diagnostic techniques, changes in disease classifications, misdiagnosis of Hodgkin's disease, an increase in AIDS-related lymphomas, radiation and even hair dyes.[1,4,7-9] Other possible clues to the increased incidence of NHL that are currently being studied include: known viruses, immunosuppressive states, herbicides, other chemicals in the environment, UV light, nutritional factors and oncogenic viruses from farm animals.[1,3,6-8,10] Although some of these explanations may be partly responsible, studies indicate that these explanations can only account for a small fraction of the increase experienced within the past several decades.[1,4,7-9]

Among some of the most promising hypotheses, researchers are studying a possible pathogenesis due to the Epstein-Barr virus and/or HTLV-1.[1,6,8,11] Since these are somewhat common viruses, researchers are focusing their effects on certain predisposing factors, namely immunodeficiency (acquired, congenital, and/or iatrogenic) and environmental factors.[6,8]

Table 1. Incidence Rates per 100,000 Persons of NHL Cases by Year and County

	1990	1991	1992	1993	1994	Total
Garfield County						
Frequency	11	8	11	9	5	44
Incidence	19.39	14.10	19.39	15.86	8.81	15.51
Kingfisher County						
Frequency	5	5	2	2	2	16
Incidence	37.84	37.84	15.14	15.14	15.14	24.22

Table 2. Incidence Rates per 100,000 Persons of NHL Cases by Age Group and County for 1990-1994

	39 & Under	40 to 64	65+	Total
Garfield County				
Frequency	3	10	31	44
Population	33,427	14,562	8,746	56,735
Incidence	5.29	17.63	54.64	15.51
Kingfisher County				
Frequency	1	6	9	16
Population	7,757	3,358	2,097	13,212
Incidence	3.22	45.41	68.12	24.22

Researchers noticing excess NHL among farmers, have hypothesized possible risk factors to be exposure to phenoxyacetic acid herbicides, organic solvents such as chlorinated hydrocarbons and less persuasively, exposure to insecticides.[3,6,12]

Many of these environmental "risk factors" are present in north central Oklahoma and have the potential to possibly explain the presence of NHL cases in these areas. However, the problem of seeking to detect cases of NHL within a community presents interesting difficulties, including: 1.) the absence of a central data collection system in Oklahoma; 2.) hospitals utilized for NHL patients include institutions in contiguous states; and 3.) there is a perceived "proprietary" ownership of this type of cancer data by the various institutions. In addition, any study from a largely rural area will need to consider the referral patterns of rural physicians and the health care access behaviors of the communities to be studied.

Methods

In an effort to find all appropriate cases of NHL for Garfield and Kingfisher counties, several different methods of data collection were utilized. Most, if not all, NHL patients presenting to the clinical practices within Garfield and Kingfisher counties were referred to hospitals with tumor registries, appropriate consultants and healthcare facilities for their diagnosis. Data were gathered from tumor registries and medical records departments in 22 hospitals within and surrounding the counties of interest, including hospitals in Oklahoma City, Tulsa and Wichita, Kansas. Data were requested according to the following variables:

(1) Initial date of diagnosis between the years 1990 and 1994, inclusive; or admission from 1-1-1990 to 12-31-1994; (2) Primary and secondary discharge diagnosis of non-Hodgkin's lymphoma (ICD-9: 202.8x; ICDO range 9590/3 to 9723/3, inclusive with manual purging of Hodgkin's cases; (3) Date of birth; (4) Sex; (5) County of residence, limited to Garfield and Kingfisher counties; and (6) Morphology codes.

Garfield County hospitals, Bass Memorial Baptist Hospital, St. Mary's Hospital, and Enid Regional Hospital, were the only surveyed hospitals that did not have complete cancer registries for the time period included in this study (1990-1994). In these cases, patients were initially identified by selecting cases with the specific primary or secondary discharge diagnosis of NHL (ICD-9-CM: 202.8x). The date of birth and the sex of each patient were used as secondary identifiers to cross-reference patients from different data sets to prevent duplication.

Since this screening method detected only inpatients with the primary or secondary discharge diagnosis of NHL, additional searches were needed to document actual incidence cases. To obtain incidence cases, all medical charts that were identified by the above-mentioned screening were reviewed for accuracy of the screening method and the initial date of diagnosis. The medical records were only identified as an included case if the discharge diagnosis of 202.8x was confirmed, NHL was identified in the patient's history of present illness, and the initial date of diagnosis was within the years 1990 through 1994, inclusive. There was no duplication of cases in the final data set and only confirmed cases were used in the statistical analysis.

Incidence rates were calculated for each county according to year of initial diagnosis, age group, and sex. Ninety-five percent confidence intervals[13] were placed around these incidence rates and were compared to the 1989 annual national incidence rate for NHL (13.7 cases per 100,000 persons).

Table 3. Incidence Rates per 100,000 Persons of NHL Cases by Sex and County for 1990-1994

	Female	Male	Total
Garfield County			
Frequency	27	17	44
Population	29,490	27,245	56,735
Incidence	18.31	12.48	15.51
Kingfisher County			
Frequency	7	9	16
Population	6,803	6,409	13,212
Incidence	20.58	28.09	24.22

Results

A total of 44 cases of NHL were confirmed for the study period in Garfield county (1990 census population = 56,735), with an additional two cases still pending confirmation. Given the available confirmed data, the incidence rates in Garfield county were fairly consistent for the five years with the peak rate of 19.39 cases per 100,000 persons occurring in 1990 and in 1992 (Table 1). The overall annual averaged incidence for the period under study for Garfield county was 15.51 cases of NHL per 100,000 persons (95% confidence interval = 10.9 to 20.1). Since the national rate of 13.7 cases per 100,000 persons is contained within the 95% confidence interval, the rate observed in Garfield county does not meet this study's requirements for a unique cancer cluster.

In Kingfisher county (1990 census population = 13,212), a total of 16 cases were detected and confirmed during the five year period. The peak rate occurred in 1990 and 1991 with 37.84 cases of NHL per 100,000 persons (Table 1.). Kingfisher county experienced an overall annual averaged incidence rate of 24.22 (95% confidence interval = 12.4 to 36.1). As with Garfield county, even though this rate was higher than the national incidence, the difference is not statistically significant given that the national annual incidence of 13.7 is contained within the 95% confidence interval.

Data for Garfield county showed cases existing for each age group with the incidence rates increasing dramatically with increasing age (Table 2). A total of 31 cases were confirmed for the age group 65 and older, this accounted for 70.45% of all cases reported in Garfield county with an incidence rate of 54.64 per 100,000 persons.

Incidence rates in Kingfisher county also increased with increasing age and exceeded the rates in Garfield county in all age categories except for the under 39 years category (Table 2). Thirty-seven and a half percent of all cases reported in Kingfisher county occurred in the age group 40 to 64, while 56.25% of all cases occurred in the age group 65 and older with an incidence rate of 68.12 per 100,000 persons.

Female cases in Garfield county outnumbered male cases by 10 (Table 3). Incidence rates were also higher in females than in males, 18.31 and 12.48 per 100,000 persons, respectively. Male cases in Kingfisher county outnumbered female cases by 2 with 9 cases and 7 cases, respectively. The incidence rate for males in Kingfisher county was 28.09 cases per 100,000 persons and for females, the incidence rate was 20.58 cases per 100,000 persons.

Discussion

The incidence rates for both Garfield and Kingfisher counties (15.51 and 24.22 per 100,000 persons, respectively) are both increased from the most recently reported national incidence rate of 13.7 cases per 100,000 persons. Clinically, these increased rates may have a significant impact upon cancer trends and available resources within these counties, especially in Kingfisher county. However, given that the national incidence rate is contained within the 95% confidence intervals for both Garfield and Kingfisher counties (10.9 to 20.1, and 12.4 to 36.1, respectively), there is no statistical significance to support the presence of a unique cancer cluster in these areas based upon this descriptive study. However, the small numbers of diagnoses of NHL and the relatively small populations in these counties allowed for greater variability and would make it more difficult to detect a statistical significance. This limitation could be remedied by further research encompassing additional years and thus, additional new patients. However, in its current form and given that the incidence rates for Garfield and Kingfisher counties were both higher than the national average of 13.7 cases per 100,000 persons, clinical significance concerning the incidence of NHL in these counties can not be ruled out. There currently exist no compiled state incidence rates for NHL within the state of Oklahoma.

The methods used in this study raise further questions regarding the validity of the data. There are a set of questions that formed the basis of this concern: (1) Are all patients with NHL referred to hospitals with active tumor boards and registries? (2) Are all cases reported to tumor registries? (3) Does selection of cases by discharge diagnosis capture all potential cases? The methods selected for this study are highly conservative, providing opportunity for cases to be missed in regions where medical record review was the primary detection method. This may affect the statistical significance of the study. Additionally, the use of this methodology was novel to both tumor registrars and medical records personnel. Thus, the potential advantages and disadvantages of this particular research "tool" need further exploration.

The amount of effort required to compile this material was enormous. Many healthcare institutions viewed the data that was requested as "proprietary" and privileged, although no individual identifiers were requested. While many of the hospital tumor board registrars were extremely helpful, others were apathetic or bureaucratic in their approach to the data requests. It is extremely important for healthcare institutions and tumor registries to be sensitive to the data needs of researchers. The ability of health care systems to respond to the information needs of clinicians should include the ability to calculate, system-wide, the incidence of rare events. This type of clinical information would allow the clinician to avoid the biases that are inherent in only dealing with one's personal experience with "rare" clinical events.

Continued research of NHL incidence rates in Garfield and Kingfisher counties, coupled with surveillance of other similar, as well as non-similar, populations in Oklahoma would place this research in perspective. This would be valuable not only for the two communities studied in this research, but would also be valuable in obtaining a state-wide incidence rate and in evaluating possible etiological factors of NHL.

Current research concerning the etiology of NHL is varied and is confounded by other secular trends in cancer diagnosing, such as improvements in diagnostic techniques and an increase in AIDS-related lymphomas. However, there are several promising hypotheses in the literature that have specific implications concerning the risk of NHL in Oklahoma. For example, it has been noticed that there seems to be an excess of NHL among farmers and in rural areas, and a possible association with certain herbicides and certain petro-chemicals.[3,6,12]

For the physicians within Garfield and Kingfisher county, this research provides some concrete evidence to support an increase in the incidence of NHL which had previously only been informally discussed within the community. Other implications such as strain upon available medical resources may have already had an impact, providing a framework for the observational sensitivity within these communities.

In light of the problems of obtaining accurate incidence data, and given the lack of other established resources, the intention of our study, in addition to describing NHL trends, is to demonstrate the importance for community data collection and the need for community physicians to be involved in prospective multi-center studies. Proper epidemiological studies are needed to reduce clinical experience biases, especially regarding relatively rare diagnoses occurring within a given time and space that could lead to an observational sensitivity.

Conclusion

Incidence rates in both Garfield and Kingfisher counties, based on a 5-year time interval, have detected an increase of NHL in these areas. The rate for Garfield county is only slightly elevated

with an incidence rate of 15.51 cases per 100,000 persons (95% confidence interval = 10.9 to 20.1). The rate for Kingfisher county is considerably elevated with an incidence rate of 24.22 cases per 100,000 persons (95% confidence interval = 12.4 to 36.1). These rates were evaluated in reference to the 1989 nation incidence rate of NHL of 13.7 cases per 100,000 persons. This study was unable to detect a statistical significance, however, there exists the possibility for considerable clinical significance based upon the conservative approach that was adopted in this study's case definition and the small numbers involved.

This study has implications for many of the practicing physicians in Oklahoma in the sense that it addresses the bias concerning the incidence of rare events, the observational sensitivity that is experienced with exposure to rare events in clinical practice, and the concern of incorporating such biases into the clinical decision making of physicians. Certainly for practicing physicians in both Garfield and Kingfisher counties, this study has addressed these concerns as well as provided some evidence to support the anecdotal evidence that had previously been informally discussed within these communities.

Additionally, this study highlights the importance of looking at research questions from community based research. This subsequently necessitates the need to design systems that will allow our state to look at these types of questions.

Addendum

Fortunately for researchers and clinicians in Oklahoma, cancer research will become more accessible and feasible in the near future. A fully operating centralized cancer registry headquarters at the Oklahoma State Department of Health started collecting cancer data on January 1, 1997, from all reportable settings and physicians in Oklahoma. The registry is also working on data sharing protocols among centers within bordering states to identify Oklahoma residents that may seek treatment in those states.

Within Oklahoma, there are currently 24 hospital based cancer registries that are organized to perform electronic data transfers to the central registry at the State Health Department. The Oklahoma Central Cancer Registry (OCCR) has also organized eleven workshops in various regions throughout the state to train personnel from all of the centers that lack an accredited tumor registry. The training sessions would include instruction on data elements to be collected, instructions on completing the abstract process, and information concerning the proper use of cancer staging materials and ICDO coding. This training is to ensure that high quality information will be entered into the central registry.

The OCCR has developed abstract forms which are designed to collect a wide variety of demographic information, as well as the stage of the cancer and the site, size, treatment, and clinical presentation. The treatment data to be collected will include information pertaining to chemotherapy, radiation therapy, hormonal and endocrine therapy, as well as experimental therapies and other treatments.

The OCCR will publish annual reports which will be available to all Oklahoma physicians and other health care providers. In addition, any physician wanting to do cancer data research is encouraged to contact OCCR personnel to request information. The registry will release all non-identifying information to interested physicians.

An example of a specific request may be as follows: a physician is planning on treating a patient with cancer at a specific site. The OCCR will be able to provide the physician with information on how other physicians are treating the same type of cancer within the same sites. Additionally, in the future, the registry may be able to inform the physician about expected success of treatment, the survival rates of similar patients, as well as other treatment options. The OCCR will be able to perform descriptive epidemiological surveys, involving various demographic factors, incidence rates of specific cancers within particular regions of Oklahoma, as well as statistical analysis services.

The OCCR is a member of the North American Association of Central Cancer Registries (NAACCR). The NAACCR receives input from eight separate institutions to create an outline of standards for data collection for all cancer registries. Among these standards is a requirement for timeliness of data, accuracy and quality of data, and a 95% completeness on case findings. All cases that are not 95% completed will require follow-up field work by the registry. To ensure that all hospitals, clinics, laboratories, mammography centers and out-patient surgical centers comply to data submission, the Oklahoma legislature has enacted a state law that requires such centers to submit all cancer cases to the OCCR within six months from the date of diagnosis, beginning January 1, 1997.

Confidentiality agreements are being established among the registry and all potential reporting centers within the state and within all neighboring states. Data sharing agreements are also being established between the registry and the In-

dian Health Service, the Veteran's Administration Hospitals, and the military hospitals within the state.

The OCCR uses the Rocky Mountain Cancer Data Systems software package for data entry and quality assurance editing. This system will be used to identify potential duplications of cases as well as potential errors in data management. Cases flagged for these reasons will warrant individual case management.

Funding for the OCCR is currently in the form of a five year grant from the Centers for Disease Control and Prevention. The registry has a staff of three, which includes a full time project coordinator and a consultant abstractor and a part-time quality control manager. Eventually, as the registry becomes fully operational, funding will be available for a full-time quality control manager, as well as an additional consultant and a case follow-up specialist.

The registry is working with the Oklahoma Medical Advisory Board to maintain high standards for data collection and to provide timely, accurate and useful information for Oklahoma physicians. These services promise to alleviate many of the frustrations of performing meaningful research on the community level and therefore allowing practicing physicians to more accurately study trends in disease instead of relying upon often potentially misleading anecdotal evidence.

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SPECIAL

AMA Council on Scientific Affairs

Immunization of Health Care Workers with Varicella Vaccine

(Reference Committee D)

Executive Summary

Varicella-zaster virus (VZV) is the etialagic agent af twa camman diseases: varicella (chickenpax) and herpes zaster (shingles). Graups such as infants under ane year af age, the immunacampramised, and adults are at increased risk af develaping camplicatians fram VZV infectian. The transmissian af VZV within health care facilities fram cantact with infected patients, staff, and visitars is a patentially seriaus prablem. Nasacamial autbreaks af varicella can result in significant marbidity and martality in high-risk patients, particularly in pediatric wards. VZV transmissian ta susceptible individuals is difficult ta prevent because expasures may accur befare appraapriate infectian cantral pracedures can be implemented.

In 1995, a varicella vaccine was appraved far use in the United States. The vaccine has been shawn ta be fairly effective in preventing varicella in adults and very effective in preventing severe disease. While current data indicate that the vaccine is safe and pases minimal risks, mare research is needed ta address cancerns abaut the lang-term safety, efficacy, and epidemialagical impact af mare widespread use af the vaccine.

It is impartant far health care warkers, especially thase warking with high-risk graups, ta knaw their VZV immune status. Unless cantraindicated, health care warkers wha have na histary af VZV infectian and are seralagically negative shauld be cansidered a priarity far immunizatian with the varicella vaccine. Administratian af the vaccine ta health care warkers cauld reduce nasacamial transmissian af VZV. Furthermare, significant cast and labar savings cauld be realized by avaiding expensive and patentially disruptive infectian cantral measures.

Report of the Council on Scientific Affairs: Immunization of Health Care Workers with Varicella Vaccine

CSA Report 2-A-97
Presented by: Mitchell S. Karlan, MD, Chair
Referred to: Reference Committee D
(Ben P. Owens, MD, Chair)

Resolution 403 (A-96), introduced by the Medical Student Section, asks: "That the American Medical Association (AMA) advocate that health care workers be given the informed option of receiving the varicella vaccine." The AMA House of Delegates referred the resolution to the Board of Trustees for further study and a report at the 1997 Annual Meeting.

Introduction and Overview

Varicella-zoster virus (VZV) is a highly contagious herpesvirus responsible for two common diseases: varicella (chickenpox) and herpes zoster (shingles).[1] Varicella results from primary VZV infection and is a common childhood illness associated with fever and a generalized pruritic rash. Following primary infection, VZV establishes itself in cells of the dorsal root ganglia where it remains latent for years. Reactivation results in herpes zoster, a localized, painful, vesicular rash involving one or adjacent dermatomes. The incidence of herpes zoster increases with age and/or immunosuppression.

Every year in the United States, thousands are hospitalized and dozens die due to complications

of VZV infection. Groups such as infants under 1 year of age, adults, the immunocompromised, and pregnant women are at increased risk for developing complications.

It is important for health care workers, especially those working with high-risk groups, to know their VZV immune status. If susceptible personnel are exposed, they are considered potentially infectious for up to 21 days.[1,2] Because the disease is communicable 1 to 2 days before symptomatology begins, significant risk for infected hospital personnel to spread the virus exists. To prevent transmission, exposed employees may need to be temporarily reassigned or furloughed.

In 1995, a varicella vaccine was approved for use in the United States. Administration of the vaccine to health care workers could reduce nosocomial transmission of VZV. Furthermore, significant cost and labor savings could be realized by avoiding expensive and potentially disruptive infection control measures.

Epidemiology

Varicella. VZV is one of the most communicable diseases known, with secondary attack rates among susceptible household contacts approximating 90%.[3,4] Humans are the only known host of this deoxyribonucleic acid (DNA) virus, which is transmitted by direct contact, droplets, or aerosols from vesicular fluid of skin lesions or secretions of the respiratory tract.[2] VZV enters the host through the upper respiratory tract. The Centers for Disease Control and Prevention (CDC) estimates that almost 4 million cases of varicella occur each year in the United States, more than 90% in persons under 15 years of age.[5] Susceptibility rates among individuals over 18 years of age are about 5% to 10% but can be as high as 50% in individuals from tropical climates where the disease is less common.[3,4]

Recent studies suggest that the epidemiology of varicella may be changing. Reports from the United States[6] and United Kingdom[7] show an unexplained increase in the incidence of varicella in persons over 14 years of age. This includes an increase in the frequency of VZV-related hospitalizations and complications.[6]

Herpes zoster. Herpes zoster occurs only in individuals who have had primary VZV infection. Most cases occur in persons over 45 years of age.[3] The incidence increases with advancing age, from less than 50 cases per 100,000 person-years among children less than 10 years of age to more than 1,000 cases per 1,00,000 person-years by age 75.[4] It is estimated that 15% of the population will experience one or more episodes of herpes zoster by 85 years of age.[8] The disease occurs more frequently in patients treated with immunosuppressive drugs, individuals with human immunodeficiency virus (HIV) infection, and patients with leukemia.

Clinical Manifestations and Complications

Varicella. Primary VZV infection is manifested as an acute, generalized illness, characterized by a relatively prolonged incubation period, ranging from 10 to 21 days, with the usual incubation period being 14 to 16 days.[1,2] Varicella usually presents with a low-grade fever (i.e., less than 102°F), malaise, and a generalized rash consisting of 250 to 500 lesions. The initial maculopapular lesions evolve into vesicular lesions, which subsequently umbilicate and crust over. Individuals are considered infectious for 1 to 2 days before the onset of rash and generally 4 to 5 days thereafter, until all vesicles are crusted.

Much of the morbidity and mortality associated with varicella is not reported.[5] Consequently, there is no comprehensive national estimate of the risk of developing complications from VZV infection.[8] Although the majority of varicella cases are self-limiting, complications occur in an estimated 150,000 to 200,000 cases annually in the United States.[9] Each year, varicella is responsible for 4,000 to 9,000 hospitalizations[4] and about 100 deaths.[5] Case fatality rates among neonates and adults are higher (6 cases per 100,000 infants, 25 cases per 100,000 persons 30 to 49 years of age) than in children (1 case per 100,000 children).[5] Whereas only 2% of reported cases of varicella occur in individuals older than 20 years of age, approximately half of all deaths occur in this age group.[8]

The CDC Advisory Committee on Immunization Practices (ACIP) identifies the following high-risk groups for severe varicella and complications:

- Premature infants born to susceptible mothers.
- Infants who are at less than 28 weeks' gestation or who weigh less than 1,000 grams (regardless of maternal immune status).
- Immunocompromised persons of all ages including persons who are undergoing immunosuppressive therapy, have malignant disease, and are immunodeficient.
- Nonimmune adults.
- Nonimmune pregnant females.

Immunologically normal adults who contract varicella have 9 to 25 times greater risk of severe morbidity and death from VZV infection compared with healthy children.[5,8] Serious compli-

cations include bacterial superinfection of the skin, Reye syndrome (often associated with salicylate administration), pneumonitis, and encephalitis.[1,3,8] VZV dissemination to the lungs is a rare complication in healthy children. Adults are at higher risk for varicella pneumonia, which can be mild and transient or progress to hypoxemia.

Varicella infection can cause severe morbidity and mortality in pregnant women and their fetuses.[10,11] The overall incidence of varicella in pregnancy is estimated to be 1 to 5 per 10,000.[10] Ten percent to 20% of infected pregnant women develop varicella pneumonia, with mortality rates as high as 40%.[11] Although the risk is low, a congenital varicella syndrome (manifested by early death, mental retardation, microcephaly, ocular abnormalities, limb hypoplasia, and other anomalies) occurs in about 2% of infants born to women who contract varicella in the first or second trimester of pregnancy.[12,13] The onset of varicella in mothers from 5 days before to 2 days after delivery can result in severe neonatal varicella, which (if untreated) is associated with infant mortality rates as high as 30%.[11]

Herpes zoster. Following varicella, VZV persists latently in the sensory nerve ganglia. The reactivation of VZV causes a localized, painful, pruritic, vesicular rash that usually appears unilaterally in the distribution of one or more adjacent sensory nerves.[1,3] The initial lesions in the affected dermatome are usually clustered in a few sites, but as the disease evolves, the lesions coalesce. Neuritic pain and hypersensitivity frequently accompany the rash. The most significant clinical manifestations of herpes zoster are acute neuritis and postherpetic neuralgia, which is a serious and potentially debilitating condition in older adults. Whereas VZV can be transmitted from the lesions of persons with herpes zoster, the likelihood of transmission is much less than from individuals with primary varicella.

The Varicella Virus Vaccine

The varicella virus vaccine, consisting of a live attenuated virus, was developed by Takahashi et al in the early 1970s.[14] The vaccine contains the Oka strain of VZV, which was obtained from an otherwise healthy Japanese boy with natural varicella. The Oka strain has been modified by U.S. researchers and evaluated in clinical trials. In March 1995, VARIVAX (varicella virus vaccine live (Oka/Merck)) was licensed for use in the United States.[15] As of March 1997, more than 5 million doses of this vaccine have been distributed in the United States. The direct cost of the vaccine is approximately $40 per dose (Merck, March 1997).

In 1996, the CDC published recommendations for use of the varicella vaccine.[5] Healthy children, 12 months to 12 years of age, should receive a single 0.5 mL dose administered subcutaneously. Healthy adolescents and adults, 13 years of age and older, should receive a 0.5 mL dose administered subcutaneously and a second 0.5 mL dose 4 to 8 weeks later.

Selected contraindications for use of the varicella vaccine include:[5,15]

- Hypersensitivity to any component of the vaccine, including a history of anaphylactoid reaction to neomycin.
- Febrile respiratory illness or other active febrile infection.
- Altered immunity. Varicella vaccine is not licensed for use in persons who have any malignant condition, including blood dyscrasias, leukemia, lymphomas, or any other malignant neoplasms affecting the bone marrow or lymphatic systems. However, the vaccine is available through a research protocol for use in patients (12 months to 17 years of age) with acute lymphoblastic leukemia. The vaccine should not be administered to persons with primary and acquired immunodeficiency, including those with symptomatic HIV infection; cellular immunodeficiencies; hypogammaglobulinemia; and dysgammaglobulinemia. Varicella vaccine should not be administered to persons receiving immunosuppressive therapy.

Pregnancy.

Selected precautions include:[5,15]

- Recent administration of blood, plasma, or immune globulin. The varicella vaccine should not be given for at least 5 months following administration of blood, plasma, or any form of immune globulin.
- Use of salicylates. Although no adverse events associated with salicylates and varicella vaccine have been reported, because of the association between aspirin use and Reye syndrome following natural varicella, it is recommended that salicylate use be discontinued for 6 weeks following vaccination
- Nonpregnant women who are vaccinated should avoid becoming pregnant for one month following each injection.

Physicians who administer the varicella vaccine should read and become familiar with the package insert[15] as well as published recommendations for use of the vaccine. Information on VZV and the vaccine is available from Merck (800-672-6372) or the CDC (800-CDC-SHOT).

Immunogenicity and Efficacy. In the United States, more than 9,000 children and 1,600 adults were immunized with the varicella vaccine

in clinical trials.[15] Seroconversion rates in children consistently exceed 95% after one dose.[15-18] Adults, however, do not respond immunologically as well as children. In a collaborative study of 187 healthy adults, seroconversion rates were 82% after one dose and 94% after a second dose, given three months later.[19] In a large multicenter clinical trial, seroconversion rates were 72% and 99% with a 4-week interval between doses and 78% and 99% with an 8-week interval in 757 adolescent and adult vaccinees.[20] As a consequence of the age-related difference in host response, the ACIP recommends that persons older than 13 years of age receive two doses of varicella vaccine to achieve high seroconversion rates.[5]

Current evidence indicates that the efficacy of the vaccine in preventing breakthrough VZV infection or severe complications is very good.[21-23] Immunized children and adults with breakthrough infection have a much less severe illness (e.g., lower fever, fewer lesions, decreased duration of illness) than would be expected without preexisting immunity. However, it is unclear what effect immune boosting caused by reinfection with wild-type VZV has on the level or duration of protection against disease. Overall, the efficacy of the varicella vaccine appears to be 70% to 90% for complete protection against VZV infection and 95% for protection against severe disease for at least 7 to 10 years after vaccination.[5]

Safety. The risks of the varicella vaccine appear to be minimal.[5,15,16] During its first year of licensure, more than 2.3 million doses of the varicella vaccine were distributed. In this period, the Vaccine Adverse Events Reporting System (VAERS) received a limited number of reports of serious medical events occurring within 6 weeks of vaccination: 4 cases of encephalitis, 7 of ataxia, 10 of erythema multiforme, and 3 of anaphylaxis.[5]

During clinical trials, more than 10,000 healthy individuals experienced no severe side effects that could be attributed to the vaccine:[16]

- In trials of more than 8,800 healthy children monitored for up to 42 days after a single dose of the vaccine, 15% had fever of 102°F or greater, 19% had injection site complaints (e.g., soreness, swelling, erythema, rash, induration), about 3% had varicellalike rash at the injection site (median 2 lesions), and about 4% had generalized varicellalike rash (median 5 lesions).
- In trials of more than 1,580 adults monitored up to 42 days after administration of the vaccine, fever occurred in approximately 10% of subjects. Injection site complaints were reported in about 24% of vaccinees receiving one dose and 33% of vaccinees receiving two doses. After the first dose, 3% of vaccinees developed an injection site rash (median 2 lesions); 6% developed a generalized varicella-like rash (median 5 lesions). The number of vaccine-associated rashes decreased to 1% or less with the second dose.

Ongoing surveillance is needed to ensure the safety of the varicella vaccine. Physicians can assist federal authorities with this activity by reporting suspected adverse events that occur after vaccination to the VAERS (800-822-7967).

Immunization of Health Care Workers

The potential for transmission of VZV within health care facilities is a serious problem. Nosocomial outbreaks of varicella can result in serious morbidity and mortality in high-risk patients, particularly in pediatric wards.[24-30] VZV transmission to susceptible individuals is difficult to prevent because infected persons are contagious for 24 to 48 hours prior to obvious clinical illness. Exposures may occur before appropriate infection control procedures can be implemented. Because up to 10% of adults are seronegative for VZV, the risks in health care facilities can be significant for exposure to infected patients, staff, and visitors.

In a recent review, Weber and colleagues[25] found that 60% to 86% (median 78%) of U.S. health care workers have had varicella. Susceptibility rates of health care workers ranged from 1% to 7% (median 3%). Following nosocomial exposure to VZV, the authors found that 2% to 16% of susceptible workers will develop clinical varicella.

The prevention and control of nosocomial VZV transmission is difficult, costly in terms of time and money, and not always effective.[31] Guidelines for the prevention and control of nosocomial VZV include the removal of susceptible employees from patient care areas and the implementation of special precautions and procedures for exposed or infected patients and employees.[5,25,32,33] Several studies demonstrate the significant economic and administrative costs associated with managing VZV exposures and outbreaks.[25,34,35] Published cost estimates for controlling single outbreaks range from $9,000 to $19,000.[25] In 1986, a large university hospital reported annual costs in excess of $55,000 for its VZV control program.[35] This included costs for serological testing of exposed workers; administration of immune globulin; rescheduling employees or replacing furloughed employees; patient isolation; and labor involved to evaluate exposures and control outbreaks.

Serological testing of health care workers and immunization of nonimmune individuals is recommended by infection control and infectious disease experts to prevent nosocomial transmis-

sion of VZV.[5,25,30,36-39] Serological testing is indicated for individuals with negative or uncertain histories of VZV infection. Individuals with reliable histories can be considered immune. With licensure of the varicella vaccine, the ACIP and U.S. Preventive Services Task Force recommend its use to protect susceptible health care workers.[5,39] In the forthcoming edition of *Guidelines for Perinatal Care*, the American College of Obstetricians and Gynecologists (ACOG) and American Academy of Pediatrics recommend that all susceptible, nonpregnant hospital personnel be offered immunization against rubella and varicella (Stanley Zinberg, MD, MS, Director of Practice Activities, ACOG, Personal Communication, 1996).

Unresolved Issues

Ongoing research should address various concerns about the long-term safety, efficacy, and epidemiological impact of more widespread use of the varicella vaccine. Of particular concern to health care workers is the risk of transmission of vaccine virus following vaccination. The virus has been shown to be present in the vesicular lesions that occur in some vaccinees, which leads to a theoretical risk of vaccine virus transmission from asymptomatic healthy vaccinees to susceptible contacts.[40] While current data suggest that healthy, vaccinated children have minimal risk of transmitting vaccine virus to their contacts,[17,23,40,41] this risk may be higher in vaccinees who develop a varicella-like rash following vaccination.[40,42] More information is needed concerning the transmission of vaccine virus from children and adults, particularly those individuals who develop a varicella-like rash following vaccination. Until such data are available, health care institutions should develop patient care guidelines for health care workers who develop a varicella-like rash or breakthrough varicella subsequent to vaccination.[5] Precautions should also be considered for health care workers without post-vaccination rash who have contact with high-risk patients.

The issue of long-term immunity is of considerable importance for health care workers because of the likelihood of repeated exposures to varicella and herpes zoster in health care settings. Whereas some degree of waning immunity has been observed in adults, current evidence suggests that this is not the case in healthy child vaccinees.[21,43,44] No evidence of loss of immunity has been noted in 6 to 10 years of follow-up in healthy children in the United States[16] or in greater than 20 years of follow-up in Japan.[44] It is important to note that in current studies, reexposure to wild-type virus may have boostered the antibody responses in those who were tested. Health care workers are likely to be consistently reexposed and may experience a similar boosting effect. Uncertainty exists as to whether universal immunization with varicella vaccine will shift the age-specific epidemiology of VZV infection; that is, shift the varicella disease burden from children to adults. Since the long-term duration of immunity is unknown, ongoing studies may indicate that booster doses of the vaccine are required.

Another issue involves the management of health care workers who receive the varicella vaccine and are subsequently exposed to VZV. Not all individuals who receive the vaccine will seroconvert. In those who do seroconvert, there is no guarantee of complete protection against disease. Whereas serological testing of vaccinees immediately after an exposure may be effective in identifying persons at risk for varicella,[5] current data are insufficient to establish definitive postexposure management guidelines for these individuals.[25]

The varicella vaccine contains infectious virus, which creates concern that the virus will establish latency in vaccinees and eventually reactivate to cause herpes zoster. However, results of several studies in healthy and leukemic children and healthy adults show no higher incidence, and in some cases lower rates of herpes zoster in vaccinees than in those with a history of varicella.[15,21,45-47] Current evidence indicates that the incidence of herpes zoster after vaccination is not increased in vaccinees and may actually be lower than in patients who have had natural varicella.

A final issue involves whether giving the vaccine to healthy elderly patients will boost immunity and decrease the frequency or severity of herpes zoster. Clinical studies are being planned to address this issue and determine the effectiveness of immunizing seropositive older adults with the varicella vaccine.[3]

Discussion

Although the varicella vaccine is less immunogenic in adults than children, it has significant clinical benefits for susceptible health care workers. Overall, the vaccine is fairly effective in preventing varicella in adults and very effective at preventing severe disease. Current data indicate that the vaccine is safe and poses minimal risks to both adults and children. When considering the use of the varicella vaccine in health care workers, physicians should inform individuals that varicella disease in adulthood is associated with an increased risk of serious complications, that the duration of vaccine immunity is not established, and that

booster doses of the vaccine may be required to maintain protection throughout adulthood.

An optimal strategy for preventing the transmission of VZV in health care facilities would require that all health care workers, including students working in health care facilities, be immune to varicella. This strategy should include health care workers in inpatient and ambulatory settings who are at increased risk of VZV exposure. Whereas individuals with a history of VZV infection can be considered immune, persons with a negative or uncertain history should undergo serologic testing. Health care workers who are seronegative for VZV and have no contraindications should be immunized.

The decision to test health care workers who believe they are susceptible to varicella prior to immunization must consider the costs of the vaccine and serological testing. Although most adults with no history of varicella are immune when serological testing is performed, the ACIP recommends serologic testing of health care workers with no definite history of varicella as likely to be cost effective.[5] Based on two studies, Weber and colleagues[25] state that the immunization of susceptible health care workers is also cost-effective for health care facilities. It is important for all health care workers, especially those working with high-risk groups, to know their VZV immune status. Use of the varicella vaccine would reduce the risk of health care workers developing varicella and transmitting the virus to patients and coworkers. Considerable cost savings could be realized by reducing the time, money, and effort needed to manage VZV exposures and outbreaks. Unless contraindicated, health care workers who have no history of VZV infection and are serologically negative should be considered a priority for immunization with the varicella vaccine. Physicians can take a leadership role by advocating policies and programs in their institutions to ensure that all health care workers are immune to varicella.

Recommendations

The Council on Scientific Affairs recommends that the following be adopted in lieu of Resolution 403 (A-96) and that the remainder of this report be filed:

1 . That the AMA advocate that, unless contraindicated, all susceptible health care workers, including students working in health care facilities, should receive the varicella vaccine. Whereas individuals with a definite history of VZV infection can be considered immune, those with a negative or uncertain history should undergo serologic testing and, if seronegative, should be immunized.

2. That the AMA urge health care facilities to incorporate guidelines for use of the varicella vaccine into infection control programs to prevent nosocomial transmission of VZV. Such guidelines should address the management of vaccinated individuals who are exposed to VZV as well as those who develop a varicella-like rash or breakthrough varicella subsequent to vaccination.

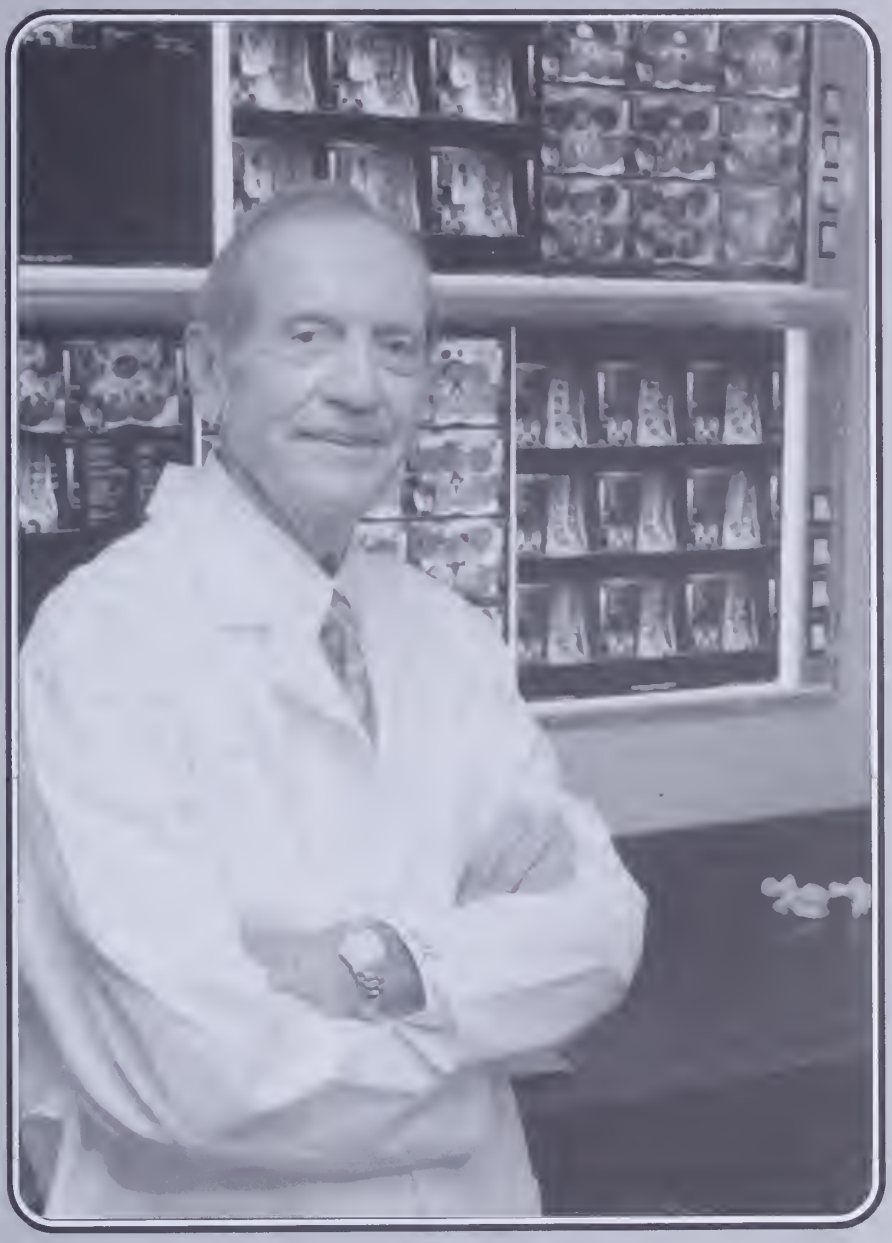
3. That the AMA encourage appropriate federal agencies to support research to determine the long-term safety and efficacy of the varicella vaccine and closely monitor the impact of widespread use of the vaccine on the epidemiology of varicella and herpes zoster. ❑

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LEADERS IN MEDICINE



A.C. Lisle, Jr., MD

The Best of the Bunch

Story by Richard Green
Photography by Robert Taylor

On Father's Day of last year, A.C. Lisle's son Jim got him a scrapbook-sized book titled *The Story of a Lifetime.* The idea was to record his memories in response to questions in each of several sections basically from childhood through "the golden years." A few months later, while on a vacation to Seaside, Oregon, with his wife, Madge, A.C. completed the book.

Jim and his two brothers, Court and David, have yet to see the book. When they do, they will likely be disappointed but not surprised.

The great majority of the questions are either not answered or answered very succinctly—"yes," "no," and occasionally a sentence or two of elaboration. As eight to ten lines are provided for each answer, the contents of the book are rather spare. For example, in questions about his college years (covering two full pages of the book), he wrote his happiest moment was "being accepted to medical school," that he had no most painful memory or amusing incident, and that he never got into trouble.

How like him to be so taciturn and bland—especially about himself. According to Jim, his father almost never talked about his work as a neurosurgeon, and when he did there was no hint of self-aggrandizement. He didn't talk about saving lives, about snatching life away from otherwise certain death. Psychologically and emotionally, he didn't need to preen for anyone, including himself. He was that increasingly rara avis, a person of supreme ability who seemingly had not one insecure bone in his body and had no need for acclaim or honors. Although he has received honors, there is no ostentatious display of them, no monument to himself, in his office or home. His *curriculum vita,* a modest two pages, is just the basics: education, occupation, and affiliated organizations; no awards, honors, or published papers are listed.

It is evidently enough that A.C. knows what he has accomplished and feels blessed that he has had such a wonderful productive life. Doubtless he would agree with Theodore Roosevelt's creed: "Far and away the best prize that life offers is the chance to work hard at work worth doing."

And yet, A.C. is not without regret: "If I had it to do over again, I would not work so many hours. I missed so much of my boys' growing up."

Of course, while they were growing up—raised essentially by Madge—A.C. was not exactly goofing off. For much of his professional life, he would begin most days early, leaving home before his sons were awake, and after operating on patients' brains and spinal cords and seeing them through recovery and spending time with their family members, he would often arrive home after his sons had gone to bed. On many weekdays when the boys were small, they would not see their father at all.

From today's vantage point, such behavior can be praised for being selfless and dedicated or criticized for being self-indulgent. There was no question in the book of memories for teasing out such distinctions. But no judgment or evaluation can be fairly rendered without considering the context of the times. The simple fact was that the demand for neurosurgery far eclipsed supply. In those days, neurosurgical supply and demand were not economic imperatives, they were matters of life and death. It was difficult, almost impossible, for A.C. to tell a patient, in effect, to go somewhere else.

Furthermore, he had lived a rigorous, disciplined routine for many years. His parents were strict but loving fundamentalist Baptists. His father had always told him, "Do all of your work first, as well as you can do it without interruptions or distractions, and then play." A.C.'s father, as an early twentieth century college graduate, was an exemplary model of his own admonition.

After growing up in the manner, if not the image, of his father, A.C. found that by the time he was a neurosurgeon, the work almost never stopped. But by then, he "couldn't wait to get up in the morning" when he was bursting with energy and a single-minded pursuit of neurosurgical excellence and elegance.

In his memories book, A.C. writes that his father inspired him the most but his mother taught him the most. Achilles Courtney Lisle, Sr., was a big fish in the small pond of McLoud, Oklahoma, which lay a bit north of U.S. 66 between Oklahoma City and Shawnee. As a University of Oklahoma–trained pharmacist (Class of 1917), he owned Lisle Drug which was as successful a business as there was in town. He was respected as a man of ability and probity, serving on the

city council, school board, and as chief of the volunteer fire department.

Lucille Ruby Bonnett was a "loving" mother, but a "hard shell" Baptist, an accomplished china painter and music lover who would not allow her family to engage in sinful activities such as dancing, going to movies, or card playing. More than anyone else, she taught A.C. and her two other sons the difference between right and wrong, good and bad. In her world, there were few gray areas and little or no equivocating. Long before A.C. was cutting out brain tumors and aneurysms, she had helped him to master decisiveness.

Achilles Courtney Lisle, Jr., was born on February 3, 1919, less than two years after his parents married and moved to McLoud to establish a home and business. Later, he had two brothers, Kenneth and Howard. Although their father's drug store was successful and he was able to buy a few sections of farmland, which he leased, the family was by no means prosperous. They lived in a small wood-framed house and practiced frugality both by nature and according to a plan; the goal was to get their three boys through college.

Their eldest son was always known as A.C., like his father, or Ace. The first Achilles was actually A.C.'s paternal grandfather, though A.C. never learned the origin of the name. Most of his school friends didn't even know his real name.

He was a serious and excellent student from the beginning. By junior high, he had a number of jobs, including newspaper boy, soda jerk (in his father's drug store), librarian assistant and the seasonal variety such as vegetable grower and seller, farm worker (every summer), and animal trapper. With the latter, he set traps along the creek bed to catch opossum and mink, skinned them, and sold their pelts. Another activity, which grew to become almost like a job, was playing the violin. His mother bought the violin and he rewarded her confidence in him by practicing diligently every day. In time, he was a regular guest, playing violin solos on a Shawnee radio program. "Humoresque" was his most requested piece. "I think I played it a jillion times."

Beginning in elementary school, A.C. followed around a kindly, impressive general practitioner named A.J. Williams. "Every once in a while, he would let me hold something or do something to help. I didn't know exactly what he was doing, but whatever it was, it worked. I could see how well liked and respected he was and I thought he had a wonderful job."

These visits were A.C.'s initial medical inspirations. As time went by, Dr. Williams also began encouraging A.C. to become a doctor. By high school, if not before, A.C.'s mind was made up;









Right: A.C. and Madge Lisle on their wedding day in March 1944.
Far right, top: Dr. Lisle in the U.S. Army Medical Corps. For right: A.C. with his parents, "Ace" and Lucille Lisle. Below: Dr. Lisle is fourth from the left on the front row in this group photo of his University of Oklahoma medical school class.



Dr. Lisle poses with his staff of surgeons at Neuroscience Specialists, P.C., in Oklohomo City. From left to right they are (seoted) Drs. Stan Pelofsky, B.J. Rutledge, Lisle, ond Don F. Rhinehort. Standing ore Drs. Eric S. Friedmon, Robert L. Remondino, Stephen K. Cogle, Lonnie J. Lamprich, ond Glenn W. Schoenhols.



Dr. Lisle is o recipient of St. Anthony Hospitol's Distinguished Service Medol.

but as much as he admired Dr. Williams, he already knew that he didn't want to follow in his footsteps. A.C. wanted to be a specialist of some kind, perhaps a surgeon. He seemed good with his hands, why not? From that time on, he never wavered in his resolve or doubted that he would make it.



Ace enrolled in pre-med at the University of Oklahoma in 1936, almost strictly as a means to an end. For three years, he went to class, studied, and worked at the OU Press and then in a botany lab. Although he had a car, a model-T bought for him by his father, his social life was virtually non-existent. He didn't date, saying he was all business and didn't have time. But the real reason may have been because he was shy around girls.

He studied every day, but not particularly hard or exhaustively, and still made almost all A's. He liked all of his courses and thought his botany teacher, Dr. George L. Cross (later OU's president), was the epitome of an excellent professor. Ace's only other activity was attending some of OU's football and basketball games. He had been a small, quick starter on a good McLoud basketball team (his nickname: Skeeter), but in his freshman year he still weighed less than one hundred pounds, so college ball was out. He wasn't disappointed; he felt blessed that he could go to the games, which were a high point of his life at college—second only to the day he received word that he had been accepted to OU's medical school.

The notification was a big deal not because of any suspense; he says he never even thought about not being admitted. Rather it was a palpable sign that his life would be changing forever, and that the key to his dream of becoming a doctor was in the lock.

His class at the medical school in 1939 was composed of sixty-three men and three women, almost all of them Oklahomans. Until then, A.C. doesn't recall ever leaving the state and had only visited Oklahoma City a few times. The most memorable time was in 1927 when his father took him to see Charles Lindbergh, who barnstormed in, waved to the large crowd from his plane, the *Spirit of St. Louis*, and flew off to his next destination and acclamation.

The initial rumor that the medical school's attrition rate would be high turned out to be true; about fifteen of the sixty-six didn't graduate, although A.C. vowed from the beginning that he wasn't about to be among them. He studied harder than ever and despite holding down a part-time job, was later inducted into the medical student honor society, Alpha Omega Alpha. He admired many of his basic science teachers, but developed a deep affection for anatomy professor Ernest Lachman, who he said knew his subject, was always prepared, and cared deeply for his students. Though A.C. and many of his classmates reciprocated that feeling, they irreverently but fondly called the short, squat Lachman "Spanky" behind his back.

One of life's pivotal moments occurred for A.C. just before his sophomore year when he met plastic surgeon Kurt VonWedel. A transplanted New Yorker, VonWedel was Oklahoma City's only plastic surgeon. In addition, he had a large industrial practice and saw these patients in his clinic, located across the street from St. Anthony Hospital. He employed two full-time MDs in his clinic but needed externs to take call at night. A.C. got one of the jobs through VonWedel's other extern, classmate Ralph Schwinn, who later asked A.C. to be the best man at his wedding.

To Ralph it was a job, taking night call, x-raying emergency patients, and patching up trivial injuries or calling in one of the physicians. But to A.C., the job was the entree to observe a great surgeon at work. The opportunities often came at night and on weekends and despite the late hour or inconvenience, Lisle was always delighted to scrub in. While attempting to describe VonWedel's surgical expertise, Lisle seems overwhelmed at trying to do justice to such greatness in words. He says the reconstructions were "beautiful" and "exquisite," that the surgeries were "very sophisticated" and that the face-lift patients were pleased with the results. He was also "superb" at skin grafting.

The downside to VonWedel was his mercurial temper. When things didn't suit him, he was ea-

pable of quickly transforming into a master of vituperation. He was well-known and feared for his temper tantrums, throwing instruments, upbraiding the nurses, rapping the knuckles of assisting surgeons. "One time he threw something in the O.R. and knocked out two wall tiles," Lisle recalls. "The sisters (at St. Anthony) would not have them replaced to teach him a lesson."

Lisle had never been the target of his wrath. For one thing, A.C. was always well prepared; for another, VonWedel was fond of the talented young man and perhaps wanted him to follow in his footsteps. That changed abruptly, however, a few days before his medical school graduation. The root of the incident had occurred a month before, when Lisle had assisted VonWedel in plastic surgery to revise an ugly scar that had resulted from an emergency surgery following an auto accident. The scar was on the leg of an otherwise beautiful young college student from Holdenville named Madge Troupe.

After the surgery, A.C. dropped by her room a few times for "a little extra attention" that he figured the patient might need. After she was discharged, they had a date or two and were obviously mutually attracted. Not only that, Madge's parents also liked A.C. and they invited A.C. to spend a long weekend with them at their large home in Holdenville. Since A.C. was supposed to be with VonWedel on that Friday, the last day of A.C.'s medical school career, he explained the situation to the plastic surgeon and asked to be excused.

VonWedel exploded. "How dare you socialize with a patient!" It was a rhetorical statement, for the surgeon plunged ahead, his mind made up. "I've had thirty-two medical students and you were the best of the bunch. Go on, get out of here. You're fired."

Just like that, a wonderful three-year relationship blew up less than twenty-four hours before A.C. would complete medical school. Dumbstruck, shock washed over Lisle. He doesn't recall saying anything, just walking away. He did go to Holdenville that weekend, and being with Madge helped to ease the sting of VonWedel's attack. Perhaps he was able to recognize the irony of having such a significant complement, "you were the best of the bunch," actually shouted at him in anger.

Years later, after A.C. and Madge had married and had two sons, Lisle ran into VonWedel. The older man apologized, saying he realized some time ago that he had been wrong and this had bothered him. Lisle accepted his apology and thanked him. That was it. There was no more to say unless VonWedel wanted to explain why he had blown up that day. But he didn't. It is possible that his feelings were hurt when A.C., his *wunderkind*, decided to go to Minnesota for his surgical internship. As the departure time drew near, VonWedel may have come to see his student's decision as a betrayal. *I give you three good years and then you run out on me.* If so, it was a long-burning fuse, but one certain eventually to detonate his anger.

During his senior year of 1943, Lisle had spent a little time with OU's Harry Wilkins, the only neurosurgeon in the state. (His partner, Jess Herrmann, was in the Army.) A.C. had been awed not only by what the man could do working inside the damaged or diseased brain, but also by his technical artistry. Wilkins, he thought, was the equal of VonWedel. (He might have been thinking that great surgeons grow on trees, but fifty years later they were still the best two surgeons he had ever seen.) After that exposure to Wilkins, Lisle decided he wanted to train in neurosurgery. At that time, there were less than three hundred neurosurgeons in the United States



Diagnostic technology has made huge strides during Dr. Lisle's career.

and many of them were in the Army. Board certification in the specialty had begun only in 1940.

A great place to begin (and a much coveted surgical internship) was the University of Minnesota, under the highly respected neurosurgeon Bill Peyton. Surgically, Lisle thrived, having completed two rotations in neurosurgery. He witnessed two momentous events during that year. First, a new drug called sulfanilamide literally saved the life of a soldier with an infection that surely would have killed him. Second, came the recognition from Boston that so-called "sciatic nephritis" was actually caused by a ruptured disk and that surgery could repair the damage and stop the pain. Not wasting any time, the Minnesota surgeons began doing several disk operations a week.

The end of the internship corresponded with Madge's graduation from OU, so this seemed to them like the perfect time to get married. While that made sense, A.C.'s next decision was more questionable. He could have entered the surgery residency in Minnesota and remained deferred from active military service, but thought Minnesota was "too damn cold." Moreover, since residencies didn't pay well, he thought that he and Madge would be economically better off if he enlisted as an Army medical officer. Then, they would have his Army pay and Madge's salary as a teacher.

So, A.C. enlisted and they were married in Holdenville in March 1944. After basic training, he was assigned to a large hospital in Atlantic City, New Jersey, that had been converted from a resort hotel. He spent about two months on the neurosurgery service; the patients were casualties from Europe, sent home with head wounds, skull fractures and gunshot or shrapnel wounds to peripheral nerves. "We were doing about fifteen procedures a day; it was fairly intense, but a great learning experience. One day I helped with a cranioplasty. A fairly large part of the patient's skull had been shot away, so I conjured the edges of a metal plate just so and eased it into place, anchoring it with metal clips. This greatly improved the patient's appearance and protected him from further injury. I was just as thrilled as he was."



On a trip to Shangai, Dr. Lisle meets with the chief of surgery of Shanghai Hospital.

After just two months of wedded bliss in Atlantic City, a normal consequence of joining the medical corps in wartime occurred. A.C. was shipped off to the war. He would not see Madge again for nearly two years. A few days after D-Day, Lt. Lisle was walking on the battle-scarred Normandy Beach. He helped to erect a field hospital near there, but then the medical staff spent the next day or so treating each other after an outbreak of food poisoning.

They were ordered to strike the tents and move further inland. "We boarded this train," he said, "and as we approached a town, we could smell it before we could see it." He meant that when the towns were destroyed the destruction included sanitation systems. Some towns had been totally devastated, leveled. Before Lisle got very busy, patching up casualties from the front, he was sent by plane back across the English Channel to a hospital in Malvern perched in the beautiful Cotswalds hill country.

Casualties came in by rail and in waves. At such times, he worked twelve to sixteen hour days, then usually had time to recover before another train brought in more mangled soldiers, and the frenzy would begin anew. Most days, he would also treat German prisoners-of-war in a detention camp. "Every time I entered the camp, this one German would shout: 'Actung!' and these poor sick bastards would struggle out of their bunks trying to get to their feet. It was... " Lisle didn't finish the sentence but his face suggested the word "pathetic."

After Germany surrendered, Lisle was assigned to remain in Malvern. His job was totally different and would have been altogether pleasant if Madge had been with him. As it was, he spent several months traveling all over England, Scotland, and Wales, examining civilians who had made claims against the U.S. Army for injuries. Since the work was not hard or intense, he could enjoy the exotic nature of where he was. There was time for salmon fishing and golf. At a club in Scotland, he played with only one club, wearing a jacket that the pro had loaned him because it was a rainy day.

Last year, exactly fifty years after he left Malvern, A.C. returned there for a short, sweet visit. The hospital was gone, a golf course in its

place, but the two barracks were still standing. As he stood there looking at them, he was flooded with memories. "It was very moving," says Lisle.

Handling the neurosurgical load alone during the war years had almost worn out Harry Wilkins and even the return of his partner Jess Herrmann, had not helped much. They were both soon inundated with patients from Oklahoma and surrounding states. The only solution was to get permission from the American Association of Neurosurgical Surgery to create a residency program. Permission was granted to take on one resident.

When Lisle heard about the opening, he applied and was accepted. With his neurosurgery experience at Minnesota, Atlantic City, and Malvern, he brought much more to the table than the typical first-year resident. Furthermore, his two mentors, Wilkins and Herrmann, though two very different personalities, were excellent role models as surgeons and people. Lisle says he came to "love them both like my own father."

During his two years with them, he participated in the state's (and probably the region's) first myelogram, which clearly showed that the patient had a ruptured disk. "On the x-ray, the opaque dye flowed past the damaged disk like water flowing past a stone in a stream bed," Lisle recalls. "We were quite impressed with this accomplishment and not knowing any better didn't give a thought to the fact that the procedure had taken almost two hours. One main reason was because we had to extract all of the oily non-soluble contrast medium from the spinal canal. Otherwise, it would stay in the spinal canal forever, showing up on any subsequent x-ray. Sometimes, we would have to stick the patient several times to capture all of the dye and this was quite uncomfortable, to say the least, for the poor patient."

Despite never having seen an arteriogram done, Lisle and Dr. Alvin Rix did the first in the state in 1946 to confirm their suspicion that the cause of the patient's ocular motor palsy was a brain aneurysm. "We did a cutdown on the carotid artery, where we injected the dye," Lisle says. "Then, we took an x-ray picture in the arterial phase, and then the venous phase. Sure enough, there on the x-ray was the image of a little aneurysm on the internal carotid artery. At that time, we didn't have the expertise to attack aneurysms directly so we just tied off the carotid artery to keep the aneurysm from blowing out."



A.C. thumbs through an atlas with "Beastie" looking on. "Beastie" is a handcarved wooden seremonial water vessel from Bali—a souvenir from one of many trips abroad.

Within two years, Lisle was going after aneurysms directly. To practice for the operation, he spent hours using a ligature carrier to tie off bits of rubber tubing, representing the vessels. Because he knew that the aneurysms would invariably be situated deep within the brain, he practiced maneuvering the ligature carrier—which looked like a miniature hockey stick with a hole in the club end holding the piece of silk—into place at the bottom of a quart milk bottle where he would tie off the rubber tubing.

Brain operations in the late 1940s were fraught with peril, as the high mortality rate attested. To get at an aneurysm or tumor, Lisle used a hand drill to bore three or four small holes in the skull. Then he used a special wire saw to cut from one hole to the next so that a flap of skull could be lifted out. This would take about 45 minutes. After the dura was cut back, the part of the brain thought to be in question was exposed. He illuminated the area with something that looked like a small auto headlight attached to a band worn around his head. Unless the problem was readily visible, he would gingerly stick a probe down into the brain, which "feels like hard Jell-O," trying to feel something different, some sort of mass. If he felt one, he would gently retract the brain, if possible, and expose



A.C. gets in a little golf practice in the shade of his own backyard.

the mass so that he could resect it, hoping that he had gotten it all, but not knowing because of the visual limitations in this pre-operating microscope era.

Sometimes, despite the clinical picture, he would find nothing. "You can't believe what a bad feeling it is to spend an hour probing for the mass you know is there and not find it." In such cases, he would call for assistance from Herrmann or Wilkins, if one were available. (About ninety percent of the neurosurgeries were performed at St. Anthony; the rest occurred at University, Children's, Mercy, and Wesley.) Sometimes, despite the swelling of the brain—usually visible on the x-rays as a distortion of a ventricle—the tumor would be no bigger than an English pea.

Intracranial swelling, via the growing size of the tumor or edema, was a critical problem that Lisle faced with regularity. "We used magnesium sulfate and saturated glucose IV but there were many times when we couldn't control the swelling. I'd open up the flap and the brain was under such pressure that it would just pop up through the opening in the skull. If I couldn't get the brain back down into the skull, I'd have no choice but to remove that part of the exposed brain to be able to close the flap."

Even with such formidable and common limitations, Lisle thought that neurosurgeons were practicing *the* most sophisticated surgery in the world. His morbidity and mortality statistics were extremely good, despite taking on the most difficult surgeries, such as the aneurysms and arteriovenous malformations (AVMs). He had to have an excellent record to qualify to take the neurosurgery boards. Then, when he and twelve others showed up at Yale to take the six-part certification exam in 1951, they were told that only six of them would pass. Lisle was one who did.

Unlike most new practicing physicians in 1949, Lisle immediately had lots of patients and soon was approaching the saturation point, or perhaps it was just the upper level of his comfort zone. At any rate, he was working day and night. By the early fifties, A.C.'s and Madge's family was complete with sons A.C. III, known as Court, Jim, and David. All are married with children and are successful in their chosen fields, but none entered medicine. "I don't think any of us were ever seriously attracted," say Jim, an Oklahoma City stockbroker. We had vague ideas of what Dad did, but what we knew was that he worked really long hours and that he usually came home tired and sometimes irritable or edgy. Now, I can appreciate where he was coming from, but not then."

Wearing down fast by the mid-1950s, Lisle took on a partner, Bob Rutledge, who had recently completed his neurosurgery residency. "I was very impressed by A.C.'s surgical skills and his compassion," Rutledge says. "When I was a resident, I was doing a diagnostic procedure called a ventriculogram on this Indian boy when he suddenly died right there on the table. I had no idea why, still don't. This was late at night, but I called Dr. Lisle who lived just north of the medical school. He came over and spent hours, it seems like, consoling the boy's family and me. I was terribly shaken."

Such lessons in compassion and dealing with death (and sometimes life) have been part of Lisle's legacy to the dozens of neurosurgery residents who have spent time with him over the last nearly fifty years. He also showed them, on a daily basis, the value of honesty and good communication skills with patients. "That was just the way I was raised, I guess," says Lisle. "I wanted my patients to be friends, to know they could count on me. Along the way, I realized that if patients like you, they won't sue you. I've only been sued once and the lawsuit was thrown out of court."

A.C. is fretting this spring afternoon. Tomorrow is his regular golf date with his best friend, Dr. Lynn Harrison. He wants to play but Madge is still recovering from what





Above: The Lisles hold three bronze sculptures that Mrs. Lisle created. The models for the figures were their three sons.
Right: A.C. and Madge, a painter as well as a sculptor, with one of her works-in-progress.

had been an excruciating attack of shingles and he doesn't know whether he should. He has been preoccupied and frustrated with her medical condition in recent years. She has had three back surgeries and when she finally seemed on the mend, she developed the shingles just after they returned from Santa Fe.

How is his own health? "Excellent," he says, stretching his arm out to knock on wood. "I've been cutting back on (the number and types of) surgeries over the last fifteen years, but I still keep my hand in, both as an occasional consultant to my partners (he now has nine) and doing some of my own piddling little surgeries, ulnar surgeries or carpal tunnel syndrome. I have no plans to retire. As long as I can be helpful and my hands and brain continue to work all right."

"He has handled old age better than I ever thought he would or could," Jim Lisle says. "As he has cut back on work, he has broadened his knowledge and experience and I think perspective on life. As I get older (he's now 49), I realize I've really learned quite a bit from him. Like basic values. How to treat people. He really has tried to live by the Golden Rule. At the same time, he's always demonstrated in many ways that if something is worth doing, it is worth doing correctly. And yet, Dad has always been very humble—especially for a surgeon. Though he was saving lives practically every day, there was no hint (to us) that he was doing anything extraordinary."

Perhaps that is why in his book of memories under the heading, "write your epitaph," A.C. Lisle left it blank. J

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The Lady of Windmere

A Short Story

By R. Richard Edde, MD

I withdrew the amber contents of the vial into the syringe and replaced the cap on the needle. The Thorazine was intended for the occupant of Bungalow Thirteen and after placing the syringe in the large pocket of my lab coat, I locked the drug cabinet and headed for the small bungalow located at the end of the serpentine walkway. Nestled in a small thicket of alder and pine, Thirteen was the home of Hazel, the sanitarium's longest confined patient. The walkway to the bungalow was bordered with a bright, green, low-growing, fragrant moss whose top was covered with small, purple flowers. A light fog hung lazily over the grounds, suggesting a somber and eerie indifference toward the sanitarium's occupants. My work here, as a medical student on a psychiatric rotation, was to observe and participate in the treatment of the hopelessly insane. Part of that participation was to give Hazel her Thorazine. She required the injection because she would cheek her pills, then later spit them, when alone, into her toilet. Injecting her with the antipsychotic drug was the only sure way of medicating her.

Windmere in the fall was a beautiful place, with the fire maple in full color and the gardens of chrysanthemums blooming wildly. During its early years, there was a fire in the main house that destroyed most of the records and Thirteen's was lost. A change of ownership and new employees resulted in the formation of a new record for Thirteen as well as a new name for its occupant. She did not remember it. We called her Hazel.

I reached Hazel's bungalow and knocked on the door. I could hear muffled sounds inside, her feet shuffling around in houseshoes, and finally the unlocking of her door. It was my first trip to Hazel's home of so many years, and I was shocked at her appearance. She was old and frail, white as a porcelain tub, and bent over almost completely at her waist. She had to turn her head to one side to look up at me towering above her. Her eyes were bloodshot and she smacked her lips repeatedly.

Without a word she let me in, and seeing the syringe, calmly rolled up her sleeve. She watched intently as the needle pierced her skin and the liquid disappeared into her arm. Her red eyes rolled back and she let out a soft moan. I capped the needle and placed the empty syringe back into my pocket. Hazel's dull eyes met mine.

"You're new here, aren't you?" she asked in a raspy voice.

"Yes," I replied, surprised that she could talk, "I'm the medical student at Windmere. Started this week."

She eyed me for a moment, then sat down. "Your shot didn't hurt. I like that."

I was uncomfortable standing there, so turned to leave.

"Will you give my shot tomorrow?" Hazel asked, as I opened the door to her bungalow.

"We'll see," I answered, and closed the door. I heard it lock behind me as I returned to the main office.

Hazel's chart revealed very little information about her condition since the fire

and almost nothing about her initial hospitalization. By all accounts, she was in her late eighties and had been confined to Windmere since she was twenty-five, sixty-odd years. Sixty years in Bungalow Thirteen. She had four charts, each the size of a large novel, and it took most of the afternoon to go through them all. I added to the records by talking to a couple of nurses who worked there for many years. Late in the day, I leaned back in my chair and tried to bring together all I now knew.

As I said, Hazel wasn't her real name, just the one invented for her after the sanitarium's records were destroyed. By then, she was on so much Thorazine she didn't care what her name was and began answering to Hazel. The earliest diagnosis, dated nearly sixty years ago, was criminal insanity. The circumstances surrounding her commitment to Windmere were sketchy but one point was abundantly clear. She had killed her husband and buried him in the small garden behind their house. Buried him minus his head. When people began wondering as to William's whereabouts, Hazel began acting weird, and finally locked herself up in her third-floor bedroom, boarding the windows. By the time the detectives found William's body, Hazel was loony tunes. William's head was never located. Unable to cooperate, Hazel was committed to Windmere, fortunate to escape the electric chair, but doomed to a life of chemical lobotomy. Sixty years of daily Thorazine injections. Sixty years of a foggy existence.

It fell to me to continue Hazel's injections, which seemed to please her, although I couldn't say the same for myself. I chose to begin each day with her, thinking that if I could get her injection behind me, the rest of the day would be easy. However, I was not prepared for the time Hazel required. What first started as nothing more than a quick visit for her injection, slowly evolved into longer and longer stays. Not talkative at first and suspicious initially, Hazel's dullness gradually changed with the passing weeks. Although her thoughts were cloudy and her speech chemically slowed, Hazel began relating stories of her childhood and youth. She could remember, with stunning clarity, the details of a bygone era, but it was as if someone had drawn a curtain around her memory since her arrival at Windmere.

Each morning, for the rest of my rotation, I sat in Bungalow Thirteen and listened to Hazel. As a child, she loved the piano, and soon traveled up and down the coast with her parents, giving concerts. Marveling at her talent, adults packed theaters everywhere just to get an earful of the young prodigy. Her favorites were Mozart and Schubert, the melodies of which she could still hum. After an hour of talking, Hazel sat in her rocking chair and knitted quietly. She was knitting a red sweater and its intricate design surprised me. Over the years, as Windmere's oldest inhabitant, her many sweaters were sold in town, and the money used to buy her necessities.

Hazel talked, some mornings, of the many parties she attended in her youth and what gala affairs they were. Men dressed in black ties and tails danced with their female escorts who were gowned in lace and pearls.

Champagne flowed freely into crystal goblets and they ate salty caviar and paté before dinners around elegantly laid tables. As a young, beautiful, and eligible young woman, Hazel rarely was without an escort and usually danced until the orchestra went home. Oh yes, they were gay parties during a time when worries seemed far away. She met William at one of those gatherings and fell madly for his charm and wit. He stood tall and erect, the curls of his black hair flowing gently around his thin, angular face. It was a soft, handsome face; his dark blue eyes took in everything around him.

To each other, they were unique, the only people in the world who ever fell in love. After a magnificent wedding, the couple went to live in a large house, on a high cliff that overlooked the ocean. Far from the bustle of a maddening world, they lived quietly, lost in a world of their own making.

The sessions with Hazel grew longer and longer in length and occasionally I could see the glimmer of a sparkle emerge through the pharmacological fog. Then, near the end of our hour together, Hazel once again grew dark and quiet and sat in her rocker, working. One day, while I watched her knit, I asked the obvious question.

"Hazel, did you really kill your husband?" I looked out the window so I didn't have to meet her gaze. She quit knitting and I could feel her stare; the skin on my neck prickled with anxiety.

"I dunno," she replied in a quaky tone. "Why?"

"You mean you don't remember?" I continued. Hazel shrugged her shoulders and returned to her sweater. 'Why did you do it?" I asked, slowly squinting her direction.

"William died in an accident," she said, matter-of-factly, her hands working feverishly with the red yarn. "He was a good man."
"Are you sure? Is that what you remember?"

Hazel turned and stared directly at me, her dark eyes penetrated my protective façade. "I remember rain," she answered. "Rain and lightning. Howling wind." Her face had become dull and her voice cracked and trailed off at the end of each phrase. "No lights in the house, only candles. Voices from upstairs, coming from our bedroom. I went to see." Tears flowed down Hazel's furrowed cheeks. "It was dark... there was laughter... I opened the door.... Saw them...together..."

Hazel was in a trance, and her words spat out like short bursts from a machine gun. She didn't answer the rest of my questions; instead, she just sat, knitting, and repeating the word *accident* over and over. I returned to the office and searched in vain through her records for answers, but they were not forthcoming. Hazel had no recollection of the murder, none whatsoever. It was as if her memory stopped with her killing William. To put it simply, when William died, Hazel died also. She put the grisly affair away in some distant corner of her mind, and locked it securely, where it remained, subdued and repressed, with the help of the Thorazine, for sixty years. The drug was her salvation, the lock on her memory. Surely if it were withdrawn, the past would issue forth in a great cataclysmic eruption, and result in a mental collapse. With the pharmacological padlock came a sort of beleaguered peace, a nostrum for the soul. She could exist then, and that was all it was, an existence, without the guilt driving her into the abyss. The abyss she created with William's murder.

I left Windmere to continue my studies, never being allowed entry into those locked recesses of Hazel's mind. I remembered her often, however, confined to Bungalow Thirteen, sitting in her rocker, knitting, and talking hesitantly about those early years. For some strange reason, she possessed the ability to recount events until that fateful, stormy night, when her torment began.

When Hazel died, they buried her at Windmere. I attended the small service, held on a misty gray autumn morning. Only a few employees were present, as well as myself, for Hazel had no friends and her family had long ago abandoned her. I stayed a while, alone in the cemetery, with Windmere's departed, unclaimed spirits. I drew closer to her grave and read the inscription on the brass marker: HAZEL: THE LADY OF WINDMERE 1884-1969. I took a handful of the fragrant moss and placed it on the freshly dug earth.

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PRAMS

Perinatal Characteristics of Women in Oklahoma: A Comparison of Communities

Background

Communities and local health systems are some of the most visible and important resources in protecting and promoting the health of their citizens. The development of a community-oriented framework for providing health and human services oversight and planning is necessary to ensure appropriate access and services are available to meet local needs. This community-based orientation requires accurate, useable, and timely information reflecting the needs and characteristics of a specific community. Information available through local health service providers, although useful, measures only those individuals served, not the entire population. It is critical that the health of individuals who do and do not access services be represented. Only by examining the health of the entire population can the health-related needs of a community as a whole be determined.

Two areas in Oklahoma with a long history of community assessment and involvement in health-related issues are Oklahoma and Tulsa counties. Recently, community-based organizations in these areas have begun to focus on the perinatal characteristics of their populations. There is an overall lack of local level data which reflect the entire population of pregnant women and their infants in these counties. Such information is essential to determine the health-related needs of this vulnerable population.

This report uses information from the Oklahoma Pregnancy Risk Assessment Monitoring System (PRAMS) to address this lack of county level data and describes differences in perinatal conditions in Oklahoma and Tulsa counties compared to the rest of the state. Until recently, statewide estimates were used to evaluate the characteristics of women and infants in these areas; however, with several years of PRAMS data collected and the overall size of these counties, it has become possible to generate county-specific estimates. The availability of local data for Oklahoma and Tulsa counties will allow a more accurate examination of pregnant women and their infants in these areas and, consequently, assist community-based agencies to promote the health and well-being of these populations on a local level.

Methods

This study used data from the Oklahoma Pregnancy Risk Assessment Monitoring System (PRAMS) to examine possible differences among Oklahoma and Tulsa counties and the rest of Oklahoma. It presents frequency distributions and 95% confidence intervals (95% CI) for a variety of characteristics including demographic, socioeconomic, life experiences, and delivery of services. Statistical significance was determined using 95% CI.

In Oklahoma

- Tulsa County has the lowest percent of teens (< 20 years old) giving birth (12.0%) compared to Oklahoma County (16.5%) and the rest of the state (17.8%).
- There is, on average, a two-year difference in the age at first birth in Tulsa County (22 years) compared to the rest of the state (20 years).
- Compared to Oklahoma County and the rest of the state, women in Tulsa County are 1.5 times less likely to drop out of school before high school graduation.
- Over one-half (52.2%) of women in Tulsa County complete part or all of a college education compared to 46.8% in Oklahoma County and 37.5% in the rest of the state.
- One-quarter of women in Tulsa County (26.7%) live in poverty compared to 31.7% in Oklahoma County and over one-third (34.4%) of women in the rest of the state.

(continued)

In Oklahoma (continued)

- Women in both Oklahoma and Tulsa counties are more likely to breastfeed their babies than women in the rest of the state; 62.6% (Tulsa Co.), 58.5% (OK Co.), and 50.1% (rest of state).
- More than one in ten women in Oklahoma (13.6%) and Tulsa (15.4%) counties do not have a working smoke alarm. Nearly one in four women (23.5%) in the rest of the state do not have a working smoke alarm in their homes.
- Women in Tulsa are the most likely to pay for prenatal care (PNC) and delivery services with insurance and the least likely to use Medicaid; the opposite is true in the rest of the state.

Demographic Characteristics

A comparison of sociodemographic characteristics (e.g., age, education) in Oklahoma and Tulsa counties and the rest of the state provides information about the female residents who are having babies in Oklahoma.

Table 1 shows that Tulsa County has the lowest percent of teens (< 20 years old) giving birth (12.0%) compared to Oklahoma County (16.5%) and the rest of the state (17.8%). Not surprisingly, Tulsa also has the lowest percent of women who were less than 20 years old when they had their first baby. The median age at first birth was 21.1, 21.9, and 19.9 years of age for Oklahoma and Tulsa counties and the rest of the state, respectively (data not shown). There is, on average, a two-year difference in the age at first birth in Tulsa County compared to the rest of the state; this difference is statistically significant.

Compared to Oklahoma County and the rest of the state, women in Tulsa County are 1.5 times less likely to drop out of school before high school graduation. Over one-half (52.2%) of women in Tulsa County complete part or all of a college education compared to 46.8% in Oklahoma County and 37.5% in the rest of the state. Women outside of Oklahoma and Tulsa counties are the most likely to graduate from high school and the least likely to complete college.

Women in Tulsa County are the most likely to be married when their babies are born (77.9%) compared to Oklahoma County (70.7%) and the rest of the state (75.1%).

Oklahoma County has the highest proportion of black, Hispanic, and other minority women (primarily Asian) compared to Tulsa County and the rest of the state (Table 1). The majority of American Indians in Oklahoma reside outside of Oklahoma and Tulsa counties, and the distribution of births to these women are consistent with this finding.

Table 1: Demographic Characteristics of Women in Oklahoma and Tulsa Counties and the Rest of the State

Characteristic	Oklahoma County		Tulsa County		Rest of State	
	Col. %	95% CI	Col. %	95% CI	Col. %	95% CI
Age						
<=17 yrs	5.7	(3.9-7.5)	3.9	(2.3-5.5)	5.8	(4.2-6.8)
18-19 yrs	10.8	(8.6-12.9)	8.1	(5.9-10.3)[5]	12.0	(10.6-13.4)[4]
20-24 yrs	26.5	(23.6-29.2)	26.5	(23.4-29.6)[5]	33.4	(31.6-35.2)[4]
25-29 yrs	30.6	(27.7-33.5)	31.7	(28.5-34.8)	26.9	(25.3-28.5)
30-34 yrs	19.4	(17.0-21.7)	20.8	(18.1-23.5)5	16.1	(14.7-17.5)[4]
35+ yrs	7.0	(5.4-8.6)	9.0	(7.0-11.0)[5]	5.8	(5.0-6.6)[4]
Age at 1st Birth						
<=17	17.7	(14.6-20.8)	13.2	(10.3-16.1)	17.5	(15.7-19.3)
18-19 yrs	18.0	(15.1-20.9)	16.5	(13.5-19.7)[5]	24.3	(22.2-26.2)[4]
20+ yrs	64.3	(60.6-68.0)[5]	70.3	(66.4-74.2)	58.2	(55.8-60.5)[3]
Education[1]						
<12 yrs	17.2	(14.3-20.1)[4]	11.6	(9.1-14.1)[3,5]	18.2	(16.4-20.0)[4]
12 yrs	36.0	(32.7-39.3)[5]	36.2	(32.9-39.5)[5]	44.3	(42.3-46.3)[3,4]
13-15 yrs	23.3	(20.4-26.2)	27.5	(24.4-30.6)[5]	21.2	(19.6-22.8)[4]
16+ yrs	23.5	(20.6-26.4)[5]	24.7	(21.8-27.6)5	16.3	(14.9-17.7)[3,4]
Marital Status[2]						
Married	70.7	(67.6-73.8)[4]	77.9	(74.8-81.0)[3]	75.1	(73.3-76.9)
Not Married	29.3	(26.2-32.4)[4]	22.1	(19.0-25.2)[3]	24.9	(23.1-26.7)
Race						
White	72.3	(68.8-75.8)	77.3	(73.7-80.8)	79.6	(77.6-81.6)
Black	16.9	(13.7-19.9)[4,5]	12.5	(9.6-15.4)[3,5]	4.6	(3.6-5.6)[3,4]
Indian	2.7	(1.5-3.9)[4,5]	6.2	(4.1-8.1)[3,5]	12.2	(10.6-13.8)[3,4]
Hispanic	5.0	(3.2-6.8)	2.7	(1.3-4.0)	2.5	(1.7-3.3)
Other	3.1	(1.7-4.5)[5]	1.3	(0.3-2.3)	1.1	(0.7-1.4)[3]

[1] Excludes women less than 19.
[2] Marital status at delivery.
[3] Statistically significant difference from Oklahoma County.
[4] Statistically significant difference from Tulsa County.
[5] Statistically significant difference from Rest of State.

Socioeconomic Status

In addition to demographic characteristics, socioeconomic status is also an important component in assessing differenc-

Table 2: Socioeconomic Status of Women in Oklahoma and Tulsa Counties and the Rest of the State

Socioeconomic Indicator	Oklahoma Co.		Tulsa Co.		Rest of State	
	Col.%	95% CI	Col.%	95% CI	Col.%	95% CI
Source of Income						
Job/Business	73.8	(70.7-76.9)	79.3	(76.5-82.3)	73.3	(71.5-75.1)
Public Assistance	23.5	(20.6-26.4)	18.6	(15.7-21.5)[5]	25.0	(23.2-26.8)[4]
Other	2.7	(1.5-3.9)	2.1	(0.9-3.3)	1.7	(1.1-2.3)
Federal Poverty Level[1,2]						
<100% FPL	31.7	(28.2-35.2)	26.7	(23.2-30.2)[5]	34.4	(32.4-36.4)[4]
100-184% FPL	22.0	(19.1-24.9)[5]	22.5	(19.4-25.6)[5]	31.1	(29.1-33.1)[3,4]
185-249% FPL	13.7	(11.3-16.1)	11.9	(9.4-14.4)	11.1	(9.7-12.5)
250+% FPL	32.6	(29.3-35.9)[5]	38.9	(35.2-42.6)[5]	23.4	(21.6-25.5)[3,4]

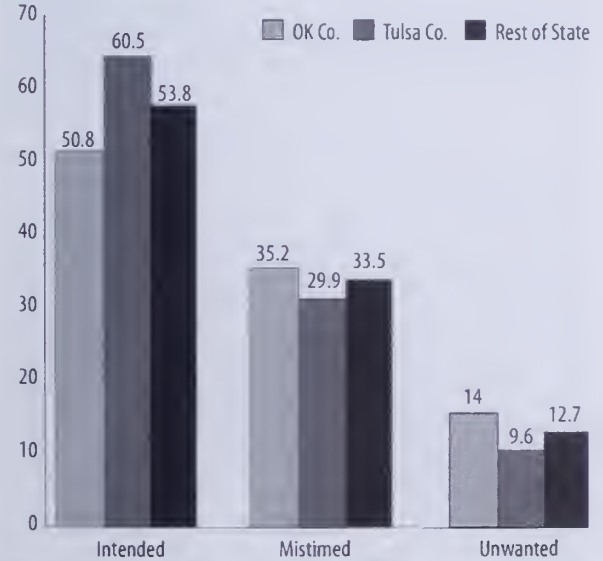
[1] In PRAMS, Federal Poverty Level is based on annual DHHS guidelines; the calculations are adjusted annually. In 1995, the FPL was $15,150 for a family of four with an additional $2,560 for each additional family member.
[2] There is an approximate non-response to the Income question used to calculate FPL of 20 percent.
[3] Statistically significant difference from Oklahoma County.
[4] Statistically significant difference from Tulsa County.
[5] Statistically significant difference from Rest of State.

es between communities. As shown in Table 2, women in Tulsa County are the most likely to report their household income came from a job or business (79.4%) compared to Oklahoma County (73.8%) and the rest of the state (73.3%). They are also the least likely to report receiving public assistance.

Federal poverty levels (FPL) presented in Table 2 are generally representative of common ranges for determining public health assistance levels and coverage groups. In general, women whose families earn less than the poverty level (< 100% FPL) are provided government health insurance for prenatal care and delivery. Similarly, women falling between 100% and 185% of FPL are also eligible for the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); however, they may not be eligible for complete health care. Women between 185% and 200% of FPL are generally representative of the working poor who typically have no health insurance coverage through their employer (uninsured) or are under-insured. Women above the 250% FPL are most typically covered by private or group insurance.

One-quarter of women in Tulsa County (26.7%) live in poverty compared to 31.7% in Oklahoma County and over one-third (34.4%) of women in the rest of the state. Women in both Oklahoma and Tulsa counties are significantly less likely than women in the rest of the state to live between 100% and 184% of poverty (22.0%, 22.5% and 31.1%, respectively). Women in these two counties are also significantly more likely than women in the rest of the state to live above 250% of poverty, with nearly two out of five Tulsa County residents (38.9%) reporting this level of income. Overall, women in Oklahoma and Tulsa counties are more likely than women in the rest of the state to live above poverty.

Figure 1: Intention of Pregnancy



Life Experiences

As shown in Figure 1, women residing in Oklahoma County are more likely than those in Tulsa County or the rest of the state to have an unintended pregnancy leading to birth; that is, the pregnancy was desired later (mistimed) or not at all (unwanted). In Oklahoma County, 49.2% of women had an unintended pregnancy compared to 39.5% in Tulsa County and 46.2% in the rest of the state.

Several perinatal behaviors are examined in Table 3. There are no major differences among the three areas for most of the behaviors (smoking, drinking, weight gain and experience of violence in the 12 months prior to delivery). An interesting exception is breastfeeding; women in both Oklahoma and Tulsa counties are significantly more likely to breastfeed their babies than women in the rest of the state; 62.6% (Tulsa Co.), 58.5% (OK Co.), and 50.1% (rest of state).

Women in all three areas still need to achieve the Healthy People 2000 national target rates for breastfeeding after delivery and reductions in prenatal smoking, experience of physical abuse, and prenatal weight gain (Table 4.)

In addition to these behaviors, the presence of a working smoke detector in the home was examined (Fig. 2) as a proxy for childhood injury prevention measures taken at home. Women in both Oklahoma and Tulsa counties are significantly more likely than women in the rest of the state to have a smoke alarm in their homes. In spite of this difference, more than one in ten women in these counties do not have a working smoke alarm (Oklahoma County: 13.6%; Tulsa County: 15.4%). Nearly one in four women (23.5%) in the rest of the state do not have a working smoke alarm in their homes.

Prenatal Care and Delivery

Table 5 presents information on prenatal care and delivery services in Oklahoma and Tulsa counties and the rest of the state. Regarding entry into and location of prenatal care, there

Table 3: Healthy People 2000 National Goals

Life Experience	Healthy People 2000 Goal
Prenatal Smoking	**3.4i** Reduce cigarette smoking to a prevalence of no more than 10 percent among pregnant women.
Prenatal Drinking	**14.10** Increase abstinence from tobacco use by pregnant women to at least 90 percent and increase abstinence from alcohol, cocaine, and marijuana by pregnant women by at least 20 percent.
Physical Violence	**7.5** Reduce physical abuse directed at women by male partners to no more than 27 per 1,000 couples.
Prenatal Weight Gain	**14.6** Increase to at least 85 percent the proportion of mothers who achieve the minimum recommended weight gain during their pregnancies.
Breastfeeding	**2.11** Increase to 75 percent the proportion of mothers who breastfeed their babies in the early postpartum period and to at least 50 percent the proportion who continue breastfeeding until their babies are 5 to 6 months old.

are no major differences among Oklahoma and Tulsa counties and the rest of the state. The only exception is women receiving prenatal care services from the Indian Health Service (IHS). Women in Oklahoma County are the least likely to receive IHS services (2.0%) compared to Tulsa County (4.4%) and the rest of the state (11.1%).

Differences among the three areas are more apparent when examining methods of payment for prenatal care and delivery services. Women in Tulsa County are the most likely to pay for prenatal care (PNC) and delivery services with insurance and the least likely to use Medicaid; the opposite is true in Oklahoma County and the rest of the state. Similar to location of PNC, higher proportions of women outside of Oklahoma and Tulsa counties use IHS to pay for prenatal care and delivery.

Discussion

There are overall differences in demographic and socioeconomic characteristics as well as perinatal conditions among Oklahoma County, Tulsa County, and the rest of the state. Influences on the differences among the three areas may include availability of services, resources, transportation, and community norms. One of the most striking differences is the presence of a working smoke alarm in the household. Oklahoma's rate of unintentional injury deaths among children aged 1-4, which were not motor vehicle related, is over 1.6 times higher than the national average (data not shown).[2] Fires are the leading cause of non-vehicular unintentional injury death among very young Oklahomans. It may be that, although household fire prevention programs exist throughout the state, they receive more media exposure in the metropolitan counties of Oklahoma and Tulsa. In addition, these differences may reflect differences in housing codes and regulations. It is also likely that the differing socioeconomic status in these areas influences the presence of a working smoke detector in the home as well as other perinatal differences found in this report.

PRAMS is a unique source of population-based data on both a county and state level; however, it is not without limitations. The PRAMS survey was developed to provide state-specific population based data on the perinatal health and outcomes of women in Oklahoma delivering a baby; its sampling methodology was not designed to provide county level information. However, when sampling weights were tested to determine accuracy of reporting county level information, weighted estimates were found to be accurate for Oklahoma and Tulsa counties. While it would be ideal to use this report as a model for reporting findings for all 77 of Oklahoma's counties, the size of these counties makes this type of analysis impossible. There are, however, other sources of county level information which are available to those organizations interested in conducting a community-based assessment.

It is hoped that the findings from this report will be incorporated into already ongoing community assessment activities in Oklahoma and Tulsa counties. The Oklahoma State Department of Health (OSDH) and its local affiliates can assist

Figure 2: Working Smoke Alarms in the Home in Oklahoma and Tulsa Counties and the Rest of the State

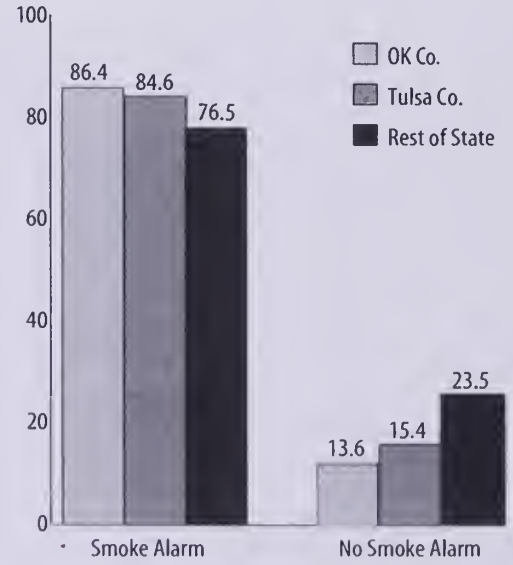


Table 4: Life Experiences in Oklahoma and Tulsa Counties and the Rest of the State

Life Experience	Oklahoma County Col.%	95% CI	Tulsa County Col.%	95% CI	Rest of State Col.%	95% CI
Prenatal Smoking[1]						
Yes	20.0	(17.2-22.7)	21.0	(18.1-23.9)	23.0	(21.2-24.8)
No	80.0	(77.3-82.7)	79.0	(76.1-81.9)	77.0	(75.2-78.7)
Prenatal Drinking[2]						
Yes	9.0	(7.0-11.0)	9.8	(7.6-12.0)	6.2	(5.2-7.2)
No	91.0	(89.0-93.0)	90.2	(88.0-92.3)	93.9	(92.8-94.8)
Physical Violence[3]						
Yes	4.7	(3.3-6.1)	5.7	(3.9-7.5)	6.4	(5.4-7.4)
No	95.3	(93.9-96.7)	94.3	(92.5-96.1)	93.6	(92.6-94.6)
Recommended Prenatal Weight Gain[4]						
Less than	18.9	(16.2-21.6)	16.2	(13.5-18.9)	20.1	(18.3-21.8)
Within	42.2	(38.6-45.6)	42.7	(38.9-46.4)	40.1	(38.1-42.1)
More than	38.9	(35.6-42.2)	41.1	(37.3-44.8)	39.8	(37.4-44.8)
Breastfed Baby						
Yes	58.5	(55.2-61.8)[6,7]	63.6	(60.1-67.1)[5,7]	50.1	(48.1-52.1)[5,6]
No	41.5	(38.2-44.8)[7]	36.4	(32.9-39.9)[7]	49.9	(47.9-51.9)[5,6]

[1] Smoked cigarettes in the three months before delivery.
[2] Consumed alcohol in the three months before delivery.
[3] Physically hurt by husband or partner in 12 months prior to delivery.
[4] Recommended prenatal weight gain from National Academy of Sciences recommendation; it is based on pre-pregnancy weight.
[5] Statistically significant difference from Oklahoma County.
[6] Statistically significant difference from Tulsa County.
[7] Statistically significant difference from Rest of State.

communities in their assessment efforts through a variety of activities, including: (1) defining community health problems and their risk factors; (2) monitoring the community for disease and injury; (3) assuring the availability of prevention and intervention services; and (4) implementing policy based on surveillance. OSDH is committed to providing this type of assistance to local communities through development and maintenance of partnerships with public and private community organizations committed to advancing the health of the community.

Table 5: Factors Related to Prenatal Care and Delivery in Oklahoma and Tulsa Counties and the Rest of the State

Factors	Oklahoma Co. Col. %	95% CI	Tulsa Co. Col. %	95% CI	Rest of State Col. %	95% CI
PNC Entry						
1st trimester	82.8	(80.3-85.3)	83.7	(80.9-86.4)	79.7	(78.1-81.3)
2nd/3rd trimester or No Care	17.2	(14.7-19.7)	16.3	(13.6-19.0)	20.3	(18.7-21.9)
PNC Location						
Hosp. Clinic	15.3	(12.6-17.8)	12.1	(9.7-14.4)	14.5	(13.1-15.9)
Health Dept[1]	10.6	(8.4-12.8)	10.9	(8.5-13.2)	8.1	(6.9-9.3)
Priv MD/HMO	65.6	(62.5-68.7)[5]	69.5	(66.2-72.8)[5]	59.7	(57.7-61.7)[3,4]
IHS	2.0	(1.0-3.0)[5]	4.4	(2.8-6.0)[5]	11.1	(9.9-12.3)[3,4]
Other	6.5	(4.9-8.1)[4]	3.1	(1.9-4.3)[3,5]	6.6	(5.5-7.5)4
PNC Payment						
Income Only	8.3	(6.5-10.0)	9.0	(7.0-11.0)	9.6	(8.4-10.8)
Insurance	54.3	(50.9-57.6)	59.5	(55.9-63.0)	41.0	(39.0-43.0)
IHS	1.5	(0.8-2.3)	4.5	(2.9-6.1)	13.0	(11.6-14.4)
Medicaid	33.3	(30.2-36.4)	26.3	(23.1-29.3)[5]	34.6	(32.6-36.6)[4]
Other	2.6	(1.4-3.8)[4]	0.7	(0.1-1.3)3	1.8	(1.2-2.4)
Delivery Payment						
Income Only	8.1	(6.2-9.8)	6.0	(4.4-7.6)	7.2	(6.2-8.2)
Insurance	54.1	(50.7-57.4)[5]	60.1	(56.6-63.6)	42.4	(40.0-44.4)[3,4]
IHS	1.2	(0.6-1.8)5	3.0	(1.8-4.2)5	11.9	(10.7-13.1)[3,4]
Medicaid	35.1	(32.0-38.2)	29.9	(26.6-33.2)[5]	37.0	(35.0-39.0)[4]
Other[2]	1.5	(0.5-2.5)	1.0	(0.2-1.8)	1.5	(0.9-2.1)

[1] Health Department may include community clinics.
[2] Cell size less than 20.
[3] Statistically significant difference from Oklahoma County.
[4] Statistically significant difference from Tulsa County.
[5] Statistically significant difference from Rest of State.

Data for Community Assessment

OSDH has a wide variety of resources available for community assessment, including information regarding:

- Births and Deaths in the state
- Health related behaviors
- Utilization of health services
- Injuries - intentional and unintentional
- Diseases in the state (e.g., AIDS, hepatitis)
- Immunizations
- HIV/STD

Resources for Community Assessment

In addition, OSDH has available several resources related to conducting community assessment, including:

- APEX
- CAN-DO

For more information, please contact the office of Maternal and Child Health Assessment and Systems Development (405) 271-6761 or access the OSDH Website on the Internet: http://www.health.state.ok.us

References

1. National Center for Health Statistics, Healthy People 2000 Review, 1992. Hyattsville, Maryland: Public Health Service. 1993.
2. The 1991-95 annual rate of unintentional injury death which was not motor vehicle related for Oklahoma children 1-4 was 16.2 per 100,000; the U.S. rate for 1994 was 9.9 per 100,000.

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PRAMSGRAM

OKLAHOMA PREGNANCY RISK ASSESSMENT MONITORING SYSTEM

Unwanted Pregnancy in Oklahoma

Introduction

Each year, close to 6,000 Oklahoma women give birth to a baby as the result of an unwanted pregnancy. These births, at the time of their conception, were said to be not wanted then or at any time in the future. The consequences of these unwanted pregnancies are considerable. Children of unwanted pregnancies are at increased risk for low birth weight, infant mortality, child abuse, and not receiving sufficient resources for healthy development.[1] The findings of these studies imply that unintended pregnancy may increase the pressure on the child welfare system, including juvenile courts, the foster care system, and related social service agencies due to the associated increased risk of child abuse and neglect.[1] Women with unwanted pregnancies are less likely to get early prenatal care as well as more likely to smoke and drink during pregnancy, more likely to be involved in violence and to be separated or divorced from their partner.[1] Furthermore, economic costs of unwanted pregnancies, in terms of public Medicaid expenditure for prenatal and delivery services alone, amounted to over $16.6 million dollars in 1992.[2] This study of unwanted pregnancy was undertaken to provide information about the extent and magnitude of this issue in Oklahoma.

Figure 1. PRAMS Question Regarding Intention of Pregnancy

Thinking back to just before you were pregnant, how did you feel about becoming pregnant?

Check the best answer.

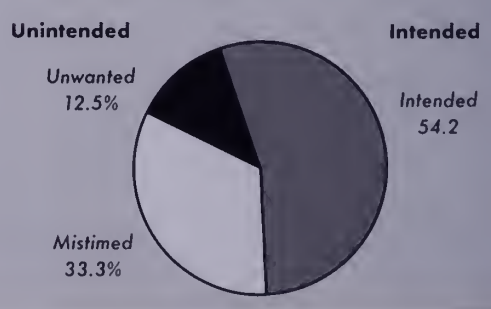
I wanted to be pregnant sooner
I wanted to be pregnant then
I wanted to be pregnant later
I did not want to be pregnant then or any time in the future
I don't know

Methods

Data from the Oklahoma Pregnancy Risk Assessment Monitoring System (PRAMS) were used to examine unwanted pregnancies resulting in live births in Oklahoma. In order to understand the intendedness of a pregnancy, mothers with a recent birth were asked to describe their feelings about becoming pregnant at the time just before they became pregnant (Fig. 1). A pregnancy was considered intended if the mother said she wanted to conceive either sooner or at that time. A pregnancy was mistimed if the mother desired to become pregnant later. A pregnancy was unwanted if it was not desired at that time or any time in the future. Previous studies have focused on the total population of unintended pregnancy, which includes both mistimed and unwanted pregnancies.[1-3]

This study includes PRAMS data from mothers delivering a live birth between April 1988-March 1995. Frequency distributions and 95% confidence intervals (95%CI) are presented. In addition to overall prevalence, demographic and lifestyle characteristics associated with unwanted pregnancy are examined.

Figure 2. Pregnancy Intention at Conception Among Live Births, Oklahoma 1988-1995



Results

Unintended pregnancies—both mistimed and unwanted—accounted for 45.7% of Oklahoma's live births between April 1988-March 1995 (Fig. 2). Unwanted pregnancies—pregnancies not wanted then or any time in the future—accounted for about 35,000 (12.5%) Oklahoma births between April 1988-March 1995. Ultimately two important questions must be answered to understand unwanted pregnancy in Oklahoma.

- The prevalence of unwanted pregnancy in Oklahoma. In other words, Who has most of the unwanted pregnancies?
- Which groups are at highest risk of unwanted pregnancy. In other words, who is most likely to have an unwanted pregnancy?

This analysis focuses on both questions. First, the total number and distribution of unwanted pregnancies in Oklahoma will be discussed. That is, with whom or what groups account for most unwanted pregnancies in Oklahoma. Second, the proportion of unwanted pregnancies among specific groups will be discussed. This includes those women or groups of women most likely to have unwanted pregnancy or at highest risk of unwanted pregnancy.

Who has most unwanted pregnancies?

Unwanted pregnancies are common in all social and economic groups. Over 75% of unwanted pregnancies resulting in live births occurred among women with at least 12 years of education (see Table 1). Over 70% of unwanted pregnancies resulting in live births occurred among white women. Additionally, 52.5% of unwanted pregnancies occurred among women married at the time of conception. Also, most unwanted pregnancies occurred among women whose family income was from a job or business (57.2%) and women who receive their prenatal care from a private medical doctor (54.1%). Although unwanted pregnancies are a common occurrence in all social and economic groups, there are populations that should be recognized as being at higher risk for unwanted pregnancy and its serious consequences.

In Oklahoma

- Among live births, 12.5% result from unwanted pregnancy—a pregnancy not wanted then or any time in the future.
- Women who are single at conception are two times more likely to have an unwanted pregnancy resulting in live birth as married women.
- Over half of unwanted pregnancies occur among women married at the time of conception.
- Women living at or below the Federal Poverty Level are nearly three times as likely to have an unwanted pregnancy resulting in live birth as women living at or above 185% of the Federal Poverty Level.
- 57.2% of unwanted pregnancies resulting in live births occur among women whose family income is from a job or business.
- African-American women are twice as likely as white women to deliver a live birth resulting from an unwanted pregnancy.
- Over 70% of unwanted pregnancies resulting in live births occur among white women.

Table 1. Distribution of Unwanted Pregnancy Resulting in Live Birth by Selected Demographic Characteristics

Maternal Characteristics	Percent	C.I.
Education[1]		
<12 Years	21.7	17.5-26.0
12+ Years	78.3	74.0-82.5
Race		
White	70.7	66.3-75.1
African-American	18.0	14.0-21.9
Native American	9.9	7.3-12.6
Other*	1.4	0.4-2.5
Marital Status		
Single at Conception	47.5	42.8-52.1
Married at Conception	52.5	47.9-57.2
Source of Income		
Job/Business	57.2	52.5-61.8
Welfare	40.7	36.0-45.3
Others	2.1	0.8-3.5
Prenatal Care Location		
Hospital	19.6	15.6-23.5
Health Department	11.5	8.2-14.8
Private MD	54.1	49.3-58.8
IHS	7.3	5.0-9.6
Others	7.5	5.0-10.1
Federal Poverty Level		
≤(100% FPL	50.4	45.5-55.6
100%-185% FPL	27.2	22.7-31.4
≥(185% FPL	22.4	18.5-26.4
Age		
≤(17	4.7	2.5-6.8
18-19	12.1	8.9-15.4
20-24	28.2	24.1-32.4
25-29	23.5	19.7-27.3
30-34	19.9	16.4-23.3
(35	11.6	9.0-14.3
Previous Births		
None	28.0	23.6-32.4
One	21.3	17.5-25.1
Two	27.4	23.4-31.5
Three	13.4	10.1-16.7
Four or More	9.9	7.1-12.7
Prenatal Care or Delivery Paid by Medicaid		
Neither	48.7	44.2-53.3
Either	51.3	46.7-55.8

CI=95% Confidence Interval
[1] Excludes mother < age 19
*cell size <20

Who is most likely to have an unwanted pregnancy?

Several factors are known to be associated with live births resulting in unwanted pregnancies. Some of these factors include being unmarried, low-income or age 35 or older.[1] Understanding these factors will help prioritize services, such as family planning, where they are most needed and wanted.

There was a statistically significant association between living in poverty and having an unwanted pregnancy resulting in a live birth. Among Oklahoma women delivering a live birth, 20% of those living at or below the Federal Poverty Level had an unwanted pregnancy as compared to only 6.8% of women living at or above 185% of the Federal Poverty Level (Table 2).[4] Thus, women living at or below the Federal Poverty Level were nearly three times as likely to have an unwanted pregnancy as women living at or above 185% of the Federal Poverty Level.

Table 2. Rate of Unwanted Pregnancy Resulting in Live Birth by Selected Demographic Characteristics

Maternal Characteristics	Percent	C.I.
Federal Poverty Level		
≤(100% FPL	20.0	17.4-22.6
100%-185% FPL	11.9	9.8-14.0
≥(185% FPL	6.8	5.5-8.0
Age		
(17	11.3	6.3-16.2
18-19	13.9	10.1-17.6
20-24	11.4	9.6-13.3
25-29	10.1	8.4-11.9
30-34	13.8	11.4-16.3
≥35	23.2	18.3-28.1
Race		
White	10.9	9.9-12.0
African-American	24.7	19.4-30.1
Native American	14.0	10.4-17.6
Other*	11.5	3.4-19.6
Source of Income		
Job/Business	9.4	8.3-10.4
Welfare	22.0	19.0-24.9
Others	15.2	6.3-24.1
Previous Births		
None	8.1	6.6-9.5
One	8.0	6.5-9.5
Two	21.8	18.5-25.0
Three	30.1	23.6-36.7
Four or More	46.7	36.9-56.5
Education[1]		
<12 Years	15.2	12.4-17.9
≥(12 Years	11.6	10.5-12.7
Marital Status		
Single at Conception	17.5	15.3-19.8
Married at Conception	9.8	8.7-10.9

CI=95% Confidence Interval
[1] Excludes mother < age 18
*cell size <20

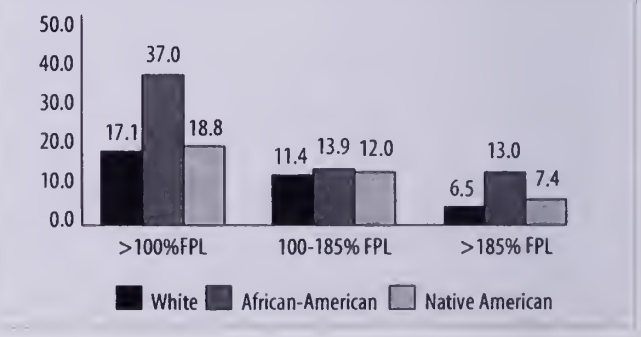
Besides income, age was also associated with having an unwanted pregnancy resulting in a live birth. Unlike mistimed pregnancies, which were most likely to occur among younger women, unwanted pregnancies were most likely to occur among women age 35 or older.[2] In fact, women age 35 or older were more than twice as likely to have an unwanted pregnancy as a woman age 17 or younger (Table 2).

Although complicated by poverty, race was also associated with unwanted pregnancy. African American women were twice as likely as white women to deliver a live birth resulting from an unwanted pregnancy. African-American women were also 2.2 times more likely to live in poverty than white women. Nonetheless, racial differences existed among women below poverty. Almost four out of every ten (37%) African-American women living in poverty had a live birth resulting from an unwanted pregnancy. No significant racial differences were observed in women above poverty (Fig. 3).

A woman's parity or number of previous births was also associated with delivering a live birth resulting from an unwanted pregnancy. Women with four or more previous births were almost six times more likely to have an unwanted pregnancy than women with no previous births (Table 2). Furthermore, regardless of the number of previous births, the percentage of women with an unwanted pregnancy increased as the mother's income decreased. For example, 14.5% of women with no previous births and incomes below poverty had an unwanted pregnancy as compared to only 2.6% of women at or above 185% of poverty with an unwanted pregnancy (Fig. 4). However, for women with at least one previous birth, as the number of previous births increased so did the likelihood of having an unwanted pregnancy. Simply, by a woman's third birth her financial status becomes insignificant. At least 22% of third births were unwanted pregnancies, regardless of poverty status.

Besides socio-demographic differences, there are behavioral and lifestyle characteristics associated with unwanted pregnancy resulting in a live birth. Women who were single at conception were two times more likely to have an unwanted pregnancy than women married at the conception of the pregnancy. Nevertheless, almost 10% of married women had an unwanted pregnancy and, as discussed earlier, more than half of unwanted pregnancies occurred among married women (Table 2). Also, women who were abused or involved in a

Figure 3. Percentage of Unwanted Pregnancy by Poverty and Race



physical fight in the 12 months before delivery were two times more likely to have an unwanted pregnancy (11.0% vs 25.3%).5 Women who were separated or divorced from their husband or partner in the 12 months before delivery were almost two times more likely to have an unwanted pregnancy (10.8% vs 20.6%). And finally, women with someone close to them with a drug or alcohol problem were 1.6 times more likely to have an unwanted pregnancy as women who do not (11.2% vs 18.4%).

PRAMS findings, are limited because they do not determine why unwanted pregnancies occur, nor does PRAMS ask about the social, economic, or cultural influences associated with unwanted pregnancy. The racial differences seen in this data reflect a much larger, more complex set of variables, including barriers to contraceptive use, choices in carrying a pregnancy to term, and the interactions of these issues with cultural and socio-economic disparity.

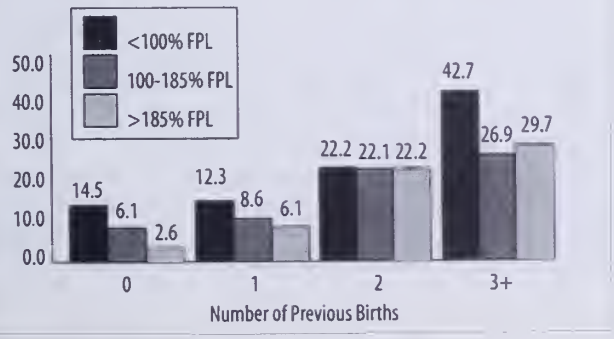
Comments/Recommendations

Teen pregnancy, non-marital childbearing, and abortion are consuming issues that are discussed in the print and electronic media almost daily. In contrast, there is little exposure for the almost invisible issue of mistimed or unwanted pregnancy. This study has identified the extent and magnitude of unwanted pregnancies carried to term in Oklahoma; it does not include unwanted pregnancies that end in induced abortions.

Family planning services are acknowledged as one of the most cost effective programs to prevent unwanted pregnancy in all socio-economic groups. Proposals for expanding health coverage for the benefit of children up to 185% of poverty should not only include prenatal care services but should include services designed to prevent unwanted pregnancies. Currently only women at less than 50% of the Federal Poverty Level are covered by Medicaid for family planning services.

In addition to the present study, two recent reports have sought to bring visibility to mistimed and unwanted pregnancy. In 1995 the Institute of Medicine (IOM), in a landmark report entitled The Best Intentions: Unintended Pregnancy and the Well-Being of Children and Families, presented a compendium of research and recommendations.[1] The IOM report concludes that reducing unintended pregnancy will require "a new national understanding about this problem" and a "new consensus that pregnancy should be undertaken only with clear intent."[1]

Figure 4.



Referencing this compelling data and drawing from the work of the IOM report The Best Intentions, the Oklahoma State Board of Health adopted policy in 1996 that "Oklahoma families be strengthened by supportive services that decrease the percent of pregnancies that are unintended and unwanted."[6] Further, in the same statement, the Board issued challenges to the people of Oklahoma, the Oklahoma State Legislature, local communities, and the media to address this issue.[6] Their statement included the following challenges:

- Improve the knowledge of all Oklahomans regarding contraception and reproductive health
- Provide $4.5 million in new and ongoing state funding for family planning services
- Provide accessible services to reduce unwanted pregnancies from approximately 6,000 per year to 4,200 per year by the year 2000
- Develop ownership and leadership within the media community for the concept of family planning as prevention as it relates to other social and health issues
- Develop community task forces and identify plans in local areas to address unintended and unwanted pregnancy

Given the serious consequences of unwanted pregnancy, the researchers of unintended pregnancy recommend that society should adopt a new social norm that "All pregnancies should be intended—that is, they should be consciously and clearly desired at the time of conception" and that consensus be built around this issue by "educating the public about the major social and public health burdens of unintended pregnancy."[1]

PRAMS is a population-based survey of Oklahoma women with a recent delivery. Analysis weights were applied to adjust for selection probability and non-response. By using weighted analysis, researchers can make strong statements about the preconception and perinatal periods for the entire population of women in Oklahoma delivering a live birth. Thus, state-specific decisions on policy and program development can be made. A stratified systematic sampling approach is used to select approximately 200 new mothers each month from the state's live birth registry. Up to three mailed questionnaires are used to solicit a response. Telephone interviews are attempted for non-respondents. Data for this report reflect live births occurring between April 1988 and March 1995. The response rate was 71%. This analysis includes information collected from 11,750 mothers. The following are the sample sizes for the questions used in this analysis: Intention of Pregnancy 10,871; Education among mothers age 19 or older 9,422; Race 10,711; Marital status at conception 10,734; Income source 10,669; Prenatal care location 10,302; Federal Poverty Level 8,893; Mother's age 10,871; Parity 10,028; Prenatal care payment source 10,431; Physical violence 10,610; Drug use among associates 10,622; Divorce or separation 10,623. All data represent state estimates.

(continued)

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From the OSDH

Legislative Success: The Child Abuse Training and Coordination Council

Recommended in the 1989 document *Protecting Oklahoma's Children: Who Is Responsible?* the Child Abuse Training and Coordination Council (CATCC) was proposed as a strategy to address certain problems within the child protection system. Undertrained, or often untrained, professionals were investigating, prosecuting, and treating young child victims of abuse and neglect. Frequently, professionals did not have access to the specialized training required to adequately serve these young victims.

In part, CATCC was the long-term vision of Robert Block, MD. Dr. Block is the chair of the Department of Pediatrics, University of Oklahoma College of Medicine, Tulsa, and Chief Child Abuse Examiner for the State of Oklahoma. "The purpose of establishing CATCC was to increase the level of expertise within our state. Child abuse is a complex area requiring specialized knowledge and the involvement of various professionals. A common thread was the need for ongoing training," says Block.



Dr. Escobar

CATCC was legislatively established in 1990. Pursuant to the statute, 20 members from a variety of disciplines within various state agencies, organizations, and associations were appointed to the CATCC by the Oklahoma Commission on Children and Youth. Current members of CATCC include Pilar Escobar, MD, a physician from Chickasha in private practice at the Southern Plains Medical Center, and Saundra Spruiell, DO, a private practice physician in Oklahoma City. Dr. Escobar serves on CATCC as the representative for the Oklahoma State Medical Association. Dr. Spruiell represents the Oklahoma Osteopathic Association. Serving as representatives for the Oklahoma State Department of Health are J.R. Nida, MD, Commissioner of Health, and Sara Reed DePersio, MD, MPH, Deputy Commissioner, Personal Health Services.

A component of CATCC is the Child Abuse Training and Coordination Program. The program was placed in the Oklahoma State Department of Health, Maternal and Child Health Service, Office of Child Abuse Prevention. The program's mandate is to provide the discipline-specific and multidisciplinary training for all professionals with responsibilities to children, youth, and families. In the seven years since inception, the CATC Program has provided training on child abuse and neglect and domestic violence issues to more than 1550 professionals. These professionals include judges, prosecutors, law enforcement officers, child welfare workers, and mental health and medical professionals, among others.

According to the Oklahoma State Department of Human Services, there were 11,646 confirmed cases of abuse and neglect in fiscal year 1996. When child abuse is disclosed or suspected, child victims find themselves involved with numerous agencies and a myriad of professionals. A frequent complaint is that the system lacks coordination between the many professionals involved. After the Ryan Luke case, the CATC Program was mandated to assist counties in the development of community-based multidisciplinary child abuse and neglect teams.

The purpose of a multidisciplinary team is to increase communication and coordination between those with a statutory responsibility for the reporting, investigation, prosecution, and treatment of child physical abuse, child sexual abuse, neglect, and child fatalities. At a minimum, members of a team should include a prosecutor, representatives from law enforcement and child welfare, mental health providers, and medical professionals. Currently, there are 29 existing and developing multidisciplinary child abuse and neglect teams across the state.

"Having a physician as a member of a multidisciplinary team is critical," says Dr. Escobar, who in addition to serving on CATCC, is also a member of the Grady County Child Abuse Team. "Every allegation of abuse must be evaluated. Confirmation of abuse requires a thorough investigation including a medical exam, history, and social evaluation. This process requires multidisciplinary involvement. With a team process, the physician can convey crucial information to the investigators so the safety of the child can be placed as the utmost priority," indicates Escobar.

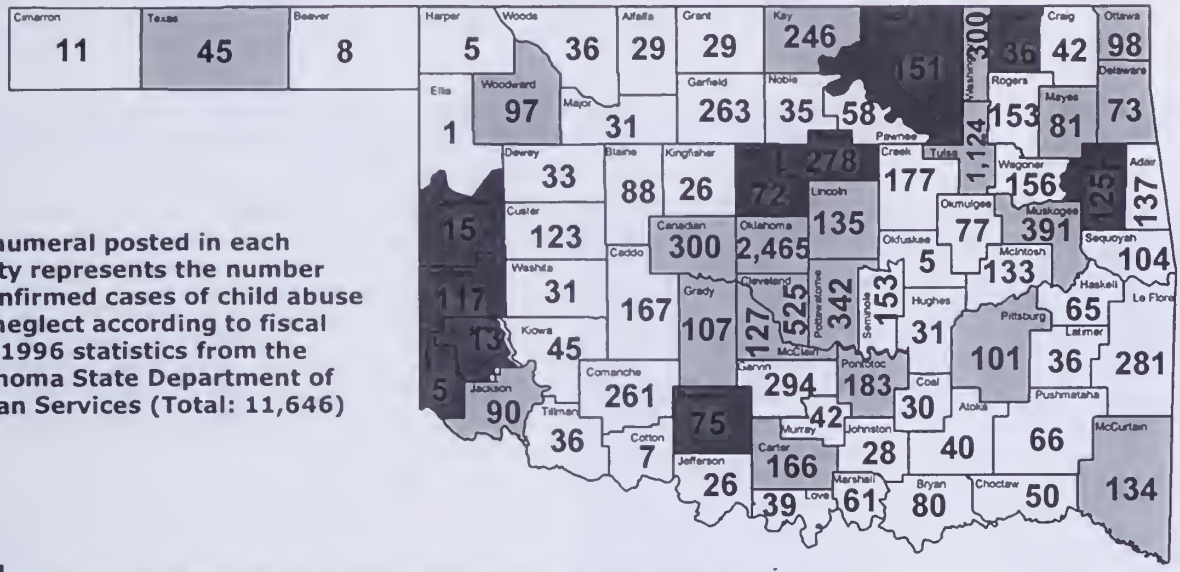
Dr. Spruiell, a new member to CATCC, encourages physicians to become involved in the multidisciplinary team process in their area. "We all have a responsibility to protect children from abuse. Through education and training, in addition to collaboration with other professionals, the problem of child abuse can best be addressed," says Spruiell.

Team information, resources for physicians and information on training opportunities are available through the CATC Program. For further assistance, contact CATC Program Coordinator, M. DeLynn Fudge, MEd, LPC, at 405/271-4477.

Child Abuse Training and Coordination Program
Oklahoma State Department of Health

Children Confirmed to be Victims of Child Abuse and Neglect by County

Fiscal Year 1997



The numeral posted in each county represents the number of confirmed cases of child abuse and neglect according to fiscal year 1996 statistics from the Oklahoma State Department of Human Services (Total: 11,646)

Counties developing multidisciplinary child abuse and neglect team.

Counties with an existing multidisciplinary child abuse and neglect teams



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White Coat Ceremony becomes newest tradition at OU

The first White Coat Ceremony for incoming medical students was conducted by the University of Oklahoma College of Medicine on Sunday, August 17. An introduction to the orientation activities of 158 new students, the Class of 2001, the ceremony was held in Oklahoma City at St. Luke's United Methodist Church.

In the presence of family, guests, and faculty members, the students were welcomed into the field of medicine by the leaders of Oklahoma's medical community and ceremonially "cloaked" with their first white coats. Dressed in white, as were attending faculty members, they then took an Oath of Commitment.

As explained by the College of Medicine, the establishment of this meaningful ritual at the beginning of medical school is intended from the very first day of training to impress upon students their responsibilities and the primacy of the doctor-patient relationship. It is to encourage students to enter into a psychological contract in which they accept the obligations inherent in the practice of medicine: to be excellent in science, to be compassionate, and to lead lives of honesty and honor. It is to clarify for them that a physician's responsibility is to take care *of* patients and also to care *for* patients—to care as well as cure.

The College of Medicine is enthusiastic about establishing this tradition and is hopeful that its meaning and purpose will be a lasting memory and a statement to ideals students will hold in their professional lives.

Executive Dean and Associate Provost Jerry B. Vannatta, MD, introduced the platform guests and directed the ceremony. The Class of 2001 was introduced by Frank W. Wilson III, MD, chair of the admissions board.

OSMA President David M. Selby, MD welcomed the students to the state's medical community, after which M. Dewayne Andrews, MD, senior associate dean of the college, presented the history of the white coat.

The guest speaker was Dr. F. Daniel Duffy, senior vice president of the American Board of Internal Medicine, a former OU faculty member and the 1989 Stanton L. Young Master teacher. He was introduced by Harold L. Brooks, MD, dean of the OU College of Medicine–Tulsa.

Dean Vannatta then led the students in the Oath of Commitment, and then concluding remarks were made by Dr. Kenneth Smith, recipient of the 1997 Stanton L. Young Master Teacher Award.



No one wore the white coat with greoter distinction thon Dr. G. Roiney Willioms, physicion, teacher, colleague, ond friend to thousonds of people ossocioted with OUHSC. Dr. Willioms possed oway in April 1997.

Text of the Oath of Commitment and the remarks of Drs. Andrews and Duffy appear below.

The students' first white coats were provided by the University of Oklahoma College of Medicine Alumni Association. Additional funding was provided by the Arnold P. Gold Foundation. Dr. Gold is a professor of clinical neurology and of clinical pediatrics at the College of Physicians and Surgeons, Columbia University. The White Coat Ceremony is his concept to cultivate and encourage physicians to seek the same satisfactions and relationships that he has found so rewarding.

As you don the white coat in your dealings with patients, wear it humbly but with pride.

Oath of Commitment

As I embark upon the study of medicine at the University of Oklahoma College of Medicine, I promise to myself and to all here present that I will:

Enter into a relationship of mutual respect with my teachers, colleagues, and staff as I strive to acquire the knowledge, skills, and virtues of a good physician;

Require self-discipline, honesty, and professionalism of myself, and expect no less from those with whom I work;

Maintain the trust expected of a physician, the confidentiality required by patients, and the judgment to know the proper limits of my competence;

Respect the humanity of those patients who allow me to learn this profession through their illnesses, always demonstrating my compassion and willingness to place their appropriate needs before my own;

Value the knowledge and wisdom of those physicians who have preceded me, endeavor to contribute to this tradition, and continue to learn and teach all the days of my life.

—Adapted by G. Kevin Donovan, MD

History of the White Coat

M. Dewayne Andrews, MD
Senior Associate Dean
OU College of Medicine

Today you will be presented with a white coat which has become one of the great symbols of *our* profession. It has not always been so. Then, how did this come to be?

By the 19th century, throughout Europe and the British Isles it was common for physicians to wear dark or black outer clothing. This was a formal appearance not unlike the tradition of the other two learned professions of the time—the clergy and law—whose robes were symbols of authority and respect. Surgeons, in fact, performed operations in frock coats of black cloth that were rarely washed. Postoperative infections were extremely common, and many operations were associated with a high mortality rate. Science then was only on the verge of discoveries that would fundamentally change the practice of medicine.

My purpose today does not permit me to discuss the fascinating history of this change in detail, only to summarize the remarkable events of the mid- and late 1800s. In France, Louis Pasteur discovered that yeast caused the fermentation of beer and wine and that putrefying bacteria caused souring. So was born the germ theory. Ignac Semmelweiss in Hungary had noted that some *thing must be* carried to the patient to account for many infections. In Scotland, a great surgeon, Joseph Lister applied Pasteur's discovery of germs to identifying the cause of wound and postoperative infections. Lister's work led Pasteur to devote his energies to associating specific bacteria with diseases and developing vaccines. And finally, following on the work of Pasteur and Lister, a German, Robert Koch, confirmed the germ theory in 1878, establishing principles for determining the cause of infectious diseases.

Dr. Lister then devised an approach to antisepsis—a method to inhibit or kill bacteria that might be present in the air or on the wound. However, this was transformed by further understanding to the concept of asepsis—prevention of carrying any bacteria to the wound. This included an extremely clean environment, special preparation of the patient's skin, sterilization of instruments and drapes, meticulous attention to avoiding contamination of the operative site, and changing the way in which the physician approached the patient. Now the surgeon must be gowned in light colored, freshly laundered and sterilized cloth. From this practice evolved the white coats and garments worn by physicians and nurses in almost all clinical settings.

Thus the white coat has come to represent cleanliness, hygiene, attention to the patient's needs, recognition by the physician that he or she must prepare carefully to approach the patient, and symbolic affirmation that the physician is committed to health, healing, and the relief of suffering.

As you don the white coat in your dealings with patients, wear it humbly but with pride. Remember always that we stand on the achievements of great scientists and physicians whose dedicated study of nature and the human condition paved the way for us to serve mankind better.

The Doctor's White Coat

F. Daniel Duffy, MD
Senior Vice President
American Board of Internal Medicine

Early last winter, I was sitting at my desk in Philadelphia watching the snow flakes fall on Market Street below my second floor office. I just left 20 years of rewarding work with students and residents at the University of Oklahoma in Tulsa to take an administrative job at the American Board of Internal Medicine. I felt the deep loss of friends, the Oklahoma winter sun, and something deep inside me—an ache I barely admitted was present. I had burned out and needed a change. As I watched the snow, Philadelphia seemed too drastic a move for me.

Just then my colleague, Linda Blank, entered my office and asked me whether I had any experience with the "White Coat Ceremony," and I told her I had never heard of the event. She was excited that many medical schools commemorated the entering of medical school with a ceremony blessing the transition from layman to professional. Linda's most recent ABIM project had been the development of the Board's program on teaching professionalism to internal medicine residents.

About ten minutes later, my phone rang. Jerry Vannatta, your Dean and my long-time colleague and friend, was calling. I was excited to hear an Oklahoma accent and dumbfounded by his request that I might speak with you today as you enter the profession of medicine—with your White Coat Ceremony. Coincidence? I don't believe so. An eerie chill filled me. Not wishing to tempt fate, I gratefully accepted the invitation.

Now what can I tell you? Probably, I can just share my own experiences on becoming a doctor as reflected in images of my own white coat, or white coats, to be more accurate. So please indulge me as I think aloud about what it means to become a doctor. Times and styles have changed, mostly for the better, so some of my experiences may seem dated, and they are. But possibly during the transition times of your career, you will reflect on your own experience, as preparing for today forced me to reflect on mine.

My first recollection of medical school is the white coat, or coats. I had two types. There was the short one, a jacket rather than a coat. That was the coat first-year medical students wore to lecture, clean labs, and when we entered the hospital—should we be so bold.

I attended Temple Medical School in north Philadelphia, which was a very rough neighborhood. Today it is called the "bad lands." Our instructor told us to wear our white jackets whenever we walked through the neighborhood. He said the jacket would protect us against violence, as the people relied on us for care. The coat was a symbol—it gave us privilege and bestowed protection. Wearing the coat separated us. We worked *in* the neighborhood but were not *of* the neighborhood.

The second coat was a long lab coat. We wore it to the dirty labs, the anatomy dissection lab, the biochemistry lab, and physiology dog lab.

From day one, my professional identity was tied inextricably to the uniforms of our profession: the white jacket for scholarly, clinical, and clean laboratory work (and protection from danger); and a long lab coat for working in the laboratories where the science of medicine was experienced, felt, and lived.

Dressing each day in one of these white coats taught this first-year medical student several important lessons about becoming a doctor. First, medical school was not just a graduate course of study, but a life-altering initiation. Dressing differently than other graduate students taught me that my academic work served one purpose—the application of my learning to the clinical service of patients. I learned that RESPECT was the cornerstone of my profession. How we dressed when we came together as a class enacted the respect we must absorb into our very plasma. As 140 or so of us were dressed alike, we symbolically experienced collegiality. We realized we were individuals united professionally to help one another become a doctor. It was not in self-seeking that we would practice our profession, but in giving freely to others. We learned humility. The uniform leveled our outward appearance. The jacket tied us together as a class and distinct from our professors whose coats were always long and white, and from the upper class men and women whose coats showed the wear and tatter of experience. Sadly, we learned about privilege and elitism—our profession separated us from the people who did not wear white coats: the neighbors, the fellow subway riders, the passers-by on the sidewalks. Pride was a defect we learned, and some mastered.

Dressing differently than other graduate students taught me that my academic work served one purpose—the application of my learning to the clinical service of patients.

The fluids of life and death spilt freely on the coat reflected the baptism taking place within me to change my heart and soul into the spirit of a healer.

The long lab coats taught me that my profession is firmly rooted in the scientific method. Long hours working on experiments and performing dissections taught me how difficult discovering truth can be. I learned how truth can be discovered through science, and how science is a tough discipline, requiring ruthless *honesty*. The scientific method taught me to control for the deception of bias, opinion, belief, wishfulness, and naivete so powerfully present in healers practicing without science. Those lab coats taught me discovery and learning through the scientific method is a most wonderful and powerful tool—one that works. I was becoming a doctor of scientific medicine.

During the second year, I learned the healing power of my white coat when I was permitted to see a patient. Little did I realize that the dazzling white, starched stiff jacket which gave me courage beyond my knowledge and authority beyond reason, also gave the kind lady I interviewed confidence, trust, and appreciation. I learned that dressing in that white jacket and entering a patient's world changed both of us. The coat symbolized the eternal and sacred bond between doctor and patient. I became but an insignificant player in the ageless act of healing. Of course, I didn't have the maturity to know that then. The coat communicated, before I opened my mouth or raised a finger, that I would RESPECT her no matter what she said or did, and I would understand that she was ill and suffering. I would keep confidential what she told me. I would act with INTEGRITY, being responsible for what I would do and say. I would be honest, and would work with her to find the truth that might heal. I would act with COMPASSION. My motives would be driven by altruism and loving care. I would be generous with my time and talent.

The truth is, as a second year medical student, I didn't have a clue about all this, but wearing the coat over and over again allowed me to enter into the lives of people in pain and assimilate these traits each time they treated me as if I had them. Such learning comes slowly. We don't do it—it is done to us. Every time I felt like a big-shot or know-it-all, I wasn't learning the RESPECT, INTEGRITY, and COMPASSION given freely to me through this ancient contract between doctors and suffering fellow humans.

During the clinical years and especially during internship, my white coat morphed into a most amazing article of clothing. It became more like a carpenter's overalls than a professional coat. Each pocket and almost every square inch of the front was a useful place to carry or pin the essential items for clinical learning. I tried cramming my entire desk into the coat. I had two breast pockets, two front pockets, and an ingenious interior pocket sewn in. Let's see, I carried a stethoscope, percussion hammer, safety pin, tongue blades, pocket flashlight, several pens (one always goes bad), index cards for patient data (I'd probably use a palmtop computer today), a Washington Manual (my peripheral brain), Sanford's pocket guide to antibiotics, the facts and formulas, the outline for dictating a history and physical, copies of H&Ps for presentation at morning report, and a pager slung on an open pocket. My well-stocked intern coat must have weighed nearly 18 pounds, not Including the remains of breakfast stuffed into a folded napkin, some mints for quick energy later, and, of course, Kleenex.

My white coat taught me that doctoring gets messy just as life can get messy. It became a collection of stains—iodine, blood, urine, vomit, pus, and who knows that else. The coat protected my clothing from the fluid spills of the patient's illness, and its stains left a record of encounters with disease and death. Wrinkled from a short night's sleep and coffee spilled down the front, the coat became a painting of a student transforming into a physician. The fluids of life and death spilt freely on the coat reflected the baptism taking place within me to change my heart and soul into the spirit of a healer. Like my coat, my heart and soul had to be stained, soiled, and torn to be changed into a physician who can really know, feel, and understand what patients experience. I learned I could not heal through knowledge alone, but to be worthy, I had to know illness, suffering, and death in a carnal way. Just as my coat needed washing to remove the stains, so I needed time off for renewal, reflection, and emotional and spiritual cleaning for this mystical professional transformation to happen.

Old worn coats were discarded at each transition period. I bought new, fresh coats to begin the next phase of my career. The new white coat gave me credibility when I felt I had none, as a student interviewing my first patient, as a new intern on call for the first night, as a new practitioner on my own for the first time, and as a new assistant profes-

sor meeting a rounding team for the first time. It was at these times the white coat felt particularly comfortable. When I felt vulnerable and insecure, it transformed in me the values I wasn't sure I had, the powers I doubted, and the professional demeanor I feared.

Amazingly, the information stuffed in the pockets slowly left the coat and entered some place in my brain, as I needed fewer crutches and reminders and guides. It was about then when I stopped wearing my white coat and was taught a lesson I didn't expect to learn. I needed to separate myself from the students and younger residents, from one who is learning to one who knows: a senior resident or an attending. What I didn't realize was I also gave up that mystical message of RESPECT, INTEGRITY, and COMPASSION the coat attributed to me every time I wore it.

I felt I no longer needed the coat's credibility, authority, or professional symbolism. My pride told me that I *am* Doctor Duffy—a doctor down to the very marrow of my bones. I've been changed and do not need any reminders or signs to show me or anyone else what I am. That was a sad day, indeed. During those attacks of hubris, I needed the coat the most, for I needed to experience the counter-transformation which comes in *taking the coat off* each day and returning to the everyday world of family, friends, and personal needs. The world of spiritual growth and understanding.

At another time, I joined the doctors who stopped wearing the white coat and adopted business attire instead. The choice always felt risky. When I wear business dress while seeing patients, I too easily forget that doctoring, to be real healing, must get messy. I avoid risking my own safety, giving freely, and assuring my patient that I am there for something more than to fill an insurance contract. My motives are driven by COMPASSION and a desire to help this person live well regardless of the condition he or she faces.

Sometimes I wanted to dress casually. I'd sling a stethoscope around my neck wearing slacks, a tee-shirt, and sneakers but no white coat. I'd let everyone know I'm a doctor *with* a life. Yet, deep inside, I wondered if my missing white coat told my patients: "I am not very interested in healing, I am just doing my duty making rounds"; "I want to get out as early as I can today"; "I do not have time to risk getting close enough for the fluids of life and death to touch me"; "I do not have a cloth to absorb your blood, pee, or tears"; "I can't really take the time to work with you on healing today"; "Your chart looks fine, you're doing great, see you tomorrow."

Well, that brings me back to where we started, the call last February. That gnawing feeling deep within me. I now realize I'd packed away my white coat. Coming here today forced me to find it, pull it out, put it on, and renew with you the spirit it contains. I may have no teaching or patient schedule at the moment, but I'm blessed with the opportunity to use the powers of healing to help guide our profession to its highest ideals through my work at the American Board of Internal Medicine.

As you accept your white coat today, you will do more than change clothing. You will accept the inevitable magical, mysterious, and wonderful transformation which it will produce in you. You will experience the trials, demands, and exhaustion of the change. Its joy and sorrow, rewards and sacrifice. You will know a career filled with the messes of life and death, people at their worst and people at their best. You will struggle against hubris and pride, constantly seeking a balance between self and healer. When you take this coat, you will enter a time and space you can never really leave again.

Being with you today comforts me in knowing that we humans are in very good hands, for white coats will be passed on to each succeeding generation and will work their mysterious transformation of eager students to scientific healers. Thank you for taking and wearing the coat and serving in our noble profession.

During those attacks of hubris, I needed the coat the most, for I needed to experience the counter-transformation which comes in taking the coat off each day and returning to the everyday world...

DHEA... Friend or Foe?

DHEA(dehydroepiandrosterone)is a product currently being offered in health food stores and magazines that might attract your patient's attention. It is promoted for everything from improving quality of sleep to increasing a person's sex drive. It is an unusual product in that it appears to be used by all age groups. Teens use it for its stimulant effects in building muscle mass. Elders are trying it as an "anti-aging" formula as well as for increasing energy and sexual function.



DHEA is a precursor to both androgens and estrogens in humans but its physiological purpose and function remains elusive. DHEA and DHEA sulfate levels plateau in humans around 20 years of age and decrease to about 2/3 of original levels at age 60. In very small controlled studies done recently, participants reported increased physical and psychological "well being" as their plasma DHEA levels rose to the range observed in young adults.

Several pharmacological effects have been attributed to DHEA in laboratory animals. It exhibits antitumor activity and a variety of metabolic effects including weight loss and a reduction of fat stores in obese animals as well as an enhancing effect on the immune system. Current investigational trials underway are studying the use of DHEA in controlling the symptoms of systemic lupus erythematosus. It seems to decrease the amount of corticosteroids needed in steroid-dependent patients and normalizes the excessive production of the interleukins prominent in this disease.

DHEA is currently being advocated as a "food supplement" to prevent heart disease, Alzheimer's disease, and the progression of HIV infection to AIDS. The most prevalent and popular claim presently is that it can prevent or slow the aging process. It is available as 25 mg and 50 mg tablets and capsules with a recommended dose of 25 mg to 100 mg daily as a dietary supplement. Many people, especially the young, take as much as 2000-3000 mg daily to enhance the physiological effects.

The use of DHEA has increased only in the last one to two years so it is too early to identify side effects that might be associated with high doses and chronic use but androgenic effects—hirsutism, voice deepening, decreased HDL cholesterol—might be expected. Nausea and vomiting, seborrheic dermatitis, and jaundice are seen with low dose chronic use. Its ability, in laboratory models, to act as a peroxisome proliferator has lead to concerns regarding hepatic and pancreatic carcinogenesis with chronic high dose use.

It seems that DHEA may hold some promise in replacement therapy but it is much too early to recommend this product to patients. It would also be wise to ask if they are taking it as a supplement.

Mycetismus

Mushroom exposures can invoke anxiety in the lay public as well as the most experienced physician. The typical exposure may involve a curious child sampling a mushroom found in the yard, which prompts an urgent call to a physician or poison information center or a hurried trip to an emergency department

Nearly 75% of mushroom exposures involve children less than 6 years of age and the majority of these cases consist of benign gastrointestinal irritants. Critical poisonings most frequently occur in adults who tend to present a longer time after exposure and have usually eaten larger quantities of mushrooms. Their mushrooms may have been collected in the wild and might include more than one species.

There are several thousand species of wild mushrooms known in North America and about 100 of these are considered "toxic" with only 10 or so considered deadly. There is real danger in eating unidentified or misidentified mushroom species in Oklahoma and our mushroom "poisoning" season is primarily from late April through October

A positive identification of a mushroom is seldom possible in an emergency. Attempting to identify the mushroom over the telephone is fraught with difficulty and should be avoided. However, when the patient or family does provide some of the ingested material, it is worthwhile to attempt an identification. The goal is to exclude the presence of one of the three most serious types of poisonings—amanitin, gyromitrin or orellanine—in the specimens presented. Physicians should be extremely suspicious of white-capped mushrooms with "warts" or "scales" on the cap. It is necessary to obtain a professional mycologist's opinion, in most cases, to identify potentially deadly mushrooms, and every effort should be made to preserve whole intact specimens (including partially digested pieces from vomitus) for inspection.

When samples of the ingested mushroom are not available, or not immediately identifiable, the clinical situation then becomes similar to almost every other case of poisoning in the emergen-

The OSMA Hassle Factor Log: Helping you to help yourself

The OSMA Hassle Factor Log has been developed to assist physicians in documenting issues with various third party entities (insurance, Medicare, Medicaid, etc.) In relation to your practice. This log is a modification of a similar one used in Texas. The OSMA will collect information, identify patterns of issues, and develop strategies to respond to these issues. Patient identification is *not* requested.

Please photocopy this log (on facing page) and use it as needed for reporting purposes. Documentation by physicians will assist the OSMA in identifying the issues.

Hassle Factor Log

Oklahoma State Medical Association

Physician Name_____ Specialty_____

Address_____

City_____ State_____ Zip_____

Contact Person_____

Request in relation to: (circle one) Medicare Medicaid Workers Comp.

Managed Care Plan Commercial Ins.

Other:_____

Name of Carrier or Agency:_____

Time spent on problem: Staff time (hours)_____ Physician Time (hours)_____

Type of problem: (circle all that apply)

Denial of Preauthorization	Down Coding/Recoding of Claims	Excessive Telephone Hold
Denial of Referral	Requests for Copy of Medical Records	Pattern of Late Payment
Denial of Claim	Inaccurate Data Entry by Insurer	Requests for Operative Report
Delay in Payment	"Missing" Support Documents	Other Documentation Requests
Lost Claims	"Missing" Claim Information	Numerous Calls for Single Claim
Pre/Post Payment Review	Telephone Always Busy	Other (specify)_____

Brief description of the problem:

***Important**: For a speedy resolution to your problem, attach copies of relevant documentation including the claim, explanation of benefits, and any correspondence.

Mail or fax responses to the OSMA Headquarters at *fax* 405-842-1834 or *mail* to 601 W I-44 Service Road, Oklahoma City, Oklahoma 73118

Poison Control *(continued)*

cy department in which the causative agent is unknown and treatment of the symptoms is indicated.

Mushroom toxins are classified into different groups according to time of onset and symptomatology. In a simple diagnostic scheme, assuming only one species was ingested, the earlier symptoms appear the better the prognosis. If symptoms are delayed five to six hours or longer, the likelihood of serious poisoning is quite high. Patients with a history of mushroom ingestion that present six or more hours later must be considered at risk of the life-threatening poisonings that follow:

Amatoxin Syndrome.— Onset of gastrointestinal symptoms at least six hours after ingestion followed in 48 to 96 hours by evidence of acute hepatic toxicity, which may rapidly deteriorate, to liver failure.

Gyromitrin Syndrome.— Gastroenteritis after 6 to 8 hours accompanied by fever, severe headache, muscle cramps, evidence of hemolysis and decreased liver function.

Orellanine Syndrome.— Gastrointestinal symptoms 12 hours or more (often days or even weeks) after ingestion, polyuria and polydipsia followed by a decrease in kidney function.

The ingested mushroom can be completely identified in only a very small percentage of exposures. Patient histories are often sketchy at best. The physician frequently must rely solely upon clinical presentation of symptoms for diagnosis and treatment. Due to the long delay in onset of symptoms for extremely poisonous mushroom ingestions, early treatment for even asymptomatic patients is imperative! Initial aggressive treatment is directed at decontamination with ipecac and charcoal followed by treatment of symptoms as they appear and close observation for 24 hours. In the symptomatic patient, pertinent laboratory tests will be useful and monitoring for fluid losses and electrolyte disturbances essential.

For further information and a flow chart to assist in mushroom poisoning diagnosis and treatment, please contact the Oklahoma Poison Control Center at 271-5454(OKC Metro area) or 1-800-POISON-1 (1-800-764-7661) statewide.

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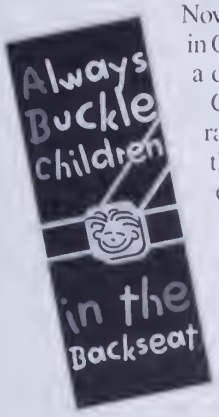
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New seat belt law says buckle up or be stopped and ticketed

Earlier this year, HB 1443 was signed into law by Governor Frank Keating. This ground-breaking piece of legislation standardizes the current safety belt law. After November 1, 1997, law enforcement officers in Oklahoma will be able to stop, and ticket, a driver for not wearing a seat belt.



Currently, Oklahoma's belt usage rate ranks in the bottom five nationally, and the lowest of all surrounding states. It is estimated by the National Highway Traffic Safety Administration that belt usage should increase dramatically with passage of this bill, and potentially save the lives of over 100 Oklahomans within the first year. Also, President Bill Clinton has asked all states to promote and increase their safety belt usage. The national Air Bag Safety Committee is working with the American Medical Association, and others to promote this issue on a national level.

Cecilia M. Alsobrook, occupant protection coordinator at the Oklahoma Highway Safety Office, says, "we are dedicated to making travel safer for everyone. We are in the process of developing advertisements to inform the public about the change in the law, and why belts are so important....

"We are the fifteenth state to pass such legislation, and have the potential to be a leader in the country."

In addition to advising the public that they can be ticketed for not using their seat belts, the Highway Safety Office is urging adult drivers to be aware that in airbag equipped vehicles, children should always be buckled in the backseat whenever possible, that every child should be buckled, and that rear-facing infant seats should always go in the backseat. The campaign's theme is ABC, Always Buckle Children in the backseat. The AMA is one of several organizations supporting the campaign.

Deaths

Gerald Matthew Steelman, MD
1914 - 1997

OSMA Life Member Gerald M. Steelman, MD, died August 29, 1997, in Johnson City, Tenn. Dr. Steelman was a native Oklahoman, born in Coalgate. He completed his undergraduate degree at Oklahoma State University and earned his medical degree at the University of Oklahoma College of Medicine in 1945. He served in the U.S. Air Force during World War II. Dr. Steelman established a general practice in Haskell in 1949. He left Haskell in 1966 to become a physician at the OSU student health center in Stillwater. Dr. Steelman retired in 1982.

Classifieds

Classified ads are 50 cents a word, with a minimum of $25 per ad. A word is one or more characters bounded by spaces. Box numbers will be assigned upon request and will add 6 words to the total. *Payment must accompany all submissions.* Orders will NOT be accepted via telephone or fax. Mail ad with payment to OSMA JOURNAL, 601 West I-44 Service Road, Oklahoma City, OK 73118. Deadline is the first of the first month of issue (e.g., Sept. 1 for Sept/Oct issue).

Physicians Wanted

FAMILY PRACTITIONER needed for a prestigious multi-specialty group in Oklahoma City. Inpatient optional, minimum call 1:5, $130K guaranteed. Academic appointment available. For more information contact Jill Winter 1-800-546-0954, ID#4142OK, fax: 314-726-3009, e-mail: careers@cejka.com.

(continued on next page)

In Memoriam

1996

William Allen Heflin, MD	August 3
Bruce Hunter Brown, MD	August 4
Arnold Gordon Nelson, MD	August 26
Ollie Wayne Dehart, MD	August 28
Leslie Arvin Arneson	September 26
Bertram Edward Sear, MD	October 4
Walter Wicker, Jr., MD	October 11
Ellis Edwin Fair, MD	October 21
William Nathan Oxley, MD	October 22
Jesse Day Shipp, MD	October 28
William Manning Moore, MD	November 28
Charles Leonard Benson, MD	December 8
William Norris Harsha, MD	December 17
Ronald S. Barlow, MD	December 21

1997

Edward J. Tomsovic, MD	January 2
Ronald W. Gilchrist, Jr., MD	January 19
Kenneth Rex Scivally, MD	February 8
Hays Richman Yandell, MD	February 19
Robert Edward Pollnow, MD	March 2
Jess Hensley, MD	March 25
Vester Meade Rutherford, MD	April 7
George Rainey Williams, MD	April 20
Benjamin Howard Gaston, MD	May 14
Roy Lawrence Neel, MD	May 19
William Carl Lindstrom, MD	May 21
Joseph Sansted Henderson, MD	May 26
Charles Marion O'Leary, MD	June 22
Dale Gustaf Johnson, MD	June 24
Edmond Herman Kalmon, Jr., MD	June 24
Edward Leroy Koger, MD	June 30
Gerald Matthew Steelman, MD	August 29

CLASSIFIEDS

Physicians Wanted *(continued)*

FP RESIDENCY PROGRAM DIRECTOR FOR SOUTHWEST OKLAHOMA. The Department of Family and Preventive Medicine, University of Oklahoma Health Sciences Center, announces the search for a Family Practice Residency Director to establish a new 12 position (4-4-4) residency program in the delightful Southwest Oklahoma community of Lawton. Candidates must have demonstrated ability as a teacher, clinician, and administrator, have a minimum of two years full time FP professional activity and FP residency teaching experience. ABFP certification or equivalent, eligibility for Oklahoma medical licensure, and commitment to obstetrical training are also essential. A very competitive salary and benefit program is offered along with an academic appointment. Please send inquiries to Steven A. Crawford, M.D., Clinical Professor and Vice Chair, Department of Family and Preventive Medicine, 900 NE 10th St., Oklahoma City, Oklahoma 73104. steve-crawford@ouhsc.edu. The University of Oklahoma is an EEOC/AAE.

OKLAHOMA: Fort Sill. PT/FT Primary Care physicians w/ER experience needed for double coverage in Fort Sill. Level II Army facility near Lawton and the beautiful Wichita Mountains. Must be BC/BE in EM or a PC specialty and have a completed residency. Excellent compensation/benefits. Contact Lori Delaney, EMSA, (800)422-3672, ext. 7456, fax (954)424-3270. EEO/AA/M/F.

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Excellent opportunity for BC/BE Internist to join 32-person multi-specialty group practice with two satellite clinics. Physician owned and directed for over 25 years. Beautiful progressive community located 25 miles East of Oklahoma City. Opportunity offers excellent compensation and benefit package. Partnership available. Please send C.V. to: Denise Roper, Shawnee Medical Center Clinic, 2801 N. Saratoga, Shawnee, OK 74801 or fax (405) 273-2632.

Physcians Wanted *(continued)*

The Department of Family and Preventive Medicine, University of Oklahoma Health Sciences Center, Enid, Oklahoma, announces a search for a Family Physician faculty member with interests in teaching, ambulatory research and promotion of family practice in rural settings. The successful candidate will be a graduate of an accredited College of Medicine, possess or be eligible for an unrestricted Oklahoma Medical License. ABFP Board certified or board eligible with preferred background of 5 years in a private family practice setting. The faculty position is in the rural community based Family Practice Residency program in Enid, Oklahoma. The program has 12 residents in a 2 and 1 program. Duties include coordination of rural training projects and maintaining patient, faculty and academic responsibilities. For further information contact JM Pontious, MD, Program Director, OU/Enid Family Medicine, 620 Madison, Suite 304, Enid, Oklahoma 73701. For questions call (405) 242-1300; FAX (405) 233-3721; mike-pontious@ouhsc.edu. Excellent benefit package provided. The University of Oklahoma is an Equal Opportunity/Affirmative Action Employer.

Internist Needed. BC/BE INTERNIST needed for Southern Plains Medical Center, 35 physician multispecialty group in Chickasha OK. Located 35 miles southwest of Oklahoma City on Interstate 44, family oriented college community of 17,000 with service area of 100,000 people. Outstanding medical center with ambulatory surgery center. 156 bed hospital next door. Excellent guarantee and benefits. Four year university, excellent public schools, good hunting and fishing, water sports, museums. Contact Jeanie Bledsoe, 2222 Iowa, Chickasha, OK. Telephone 405-222-9583 or 405-224-5507.

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D A Mace, M D
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After his election as OMPAC chairman at this spring's annual meeting, Jeffrey Shaver, MD, an Edmond ophthalmologist, wrote the following message to all Oklahoma physicians: "State and federal legislation continues to impinge upon the practice of medicine each year. It is imperative that medicine have a strong voice at the legislature so that you and your patients continue to benefit from a favorable practice environment. OMPAC is committed to this goal, but we need your support. If we all participate, then we can all benefit from a strong and influential presence at the state Capital.

"Your new OMPAC Board is making changes to align political gifting with the favorable voting records of candidates. Board meetings continue to be open to all the members, and we encourage your attendance and input. The goal of the OMPAC Board is to make OMPAC a powerful political tool to be used for improving the provision of health care for Oklahomans and the physicians who care for them. Please become a member today and join us at our next board meeting."

OMPAC provides access to the political process. The future of medicine is being shaped in our state and national capitals. We have to participate in the debate to make sure Medicine's point of view is heard. Many give individually to candidates of their own choice. However, when contributions come from "Organized Medicine," it sends a much stronger message to the recipient, saying that the entire organization of some 4,500 physicians and spouses who touch the lives of tens of thousands of Oklahomans each day are standing together on the issues. The politicians know the potential physicians and their spouses have to influence public opinion and policy.

OMPAC's purpose is to elect officials who will be advocates on our behalf as legislation is debated, both here at home and in Washington, DC, that will affect medicine. For every $100 contribution, $50 supports AMPAC, our affiliate on the national level, and $50 funds OMPAC's activities in state legislative races.

If you have any questions about becoming a member of OMPAC, please contact Judy Lake, OMPAC director, at 405-843-9571 or 800-522-9452.

"You don't buy membership in an organization, you buy cooperation of people with whom you can join hands to do the things you cannot do alone."

—Jefferson County, KY RTA Newsletters

Health Promotions

Did you know this year we celebrate 75 years as an organization dedicated to the health of America?

We should be proud of our accomplishments, but remember, there is still much to do.

Violence continues to escalate!! Our Stop America's Violence Everywhere campaign continues to grow. Since October 1996, Save-a-Shelter, a branch of the S.A.V.E. program, has united physicians and their spouses in states and counties nationwide to adopt shelters, transition homes, rape crisis centers, and other community resources for abused women and children. Violence on television is another issue we can address.

Your American Medical Association Alliance has many resources to help you with your health projects. I urge you to take advantage of their expertise and to share your ideas with the rest of us.

—Maureen Bynum
OSMAA Health Promotion Chair

THE LAST WORD

■ **Tulsa physician Jerry L. Puls, MD, has been appointed** to serve on the Oklahoma State Board of Medical Licensure and Supervision by Governor Frank Keating. Dr. Puls, a pathologist, was president of the Tulsa County Medical Society in 1987 and has served as chairman of the OSMA Board of Trustees.

■ ***OSMA Online*, the OSMA's Internet web site, has been** undergoing a refurbishing this summer. Information has been updated and a new design is being phased in. Physicians who have not visited the site lately might want to take a look. The site's URL is <http://www.osmaonline.org>.

OSMA e-mail also has been upgraded for better service to members and easier use by staff members. E-mail can now be sent directly to individual staff members and OSMA lobbyists Lynne White and Vickie Carr by combining the individual's last name with the ending @osmaonline.org (e.g., mail to Kathy Musson would be addressed <musson@osmaonline.org>). General interest areas may also be addressed by using the following prefixes with the @osmaonline.org ending: execdir, staff, administration, services (member services), cme, finance, internet, legislation, meetings, members (membership), ompac, osma, publications, or alliance. Examples: <legislation@osmaonline.org>, <publications @osmaonline.org>.

Please discontinue use of the old e-mail address: osma @ionet.net. It is no longer in service.

■ **Physicians wanting to document their CME hours now** can complete the application for the AMA Physician Recognition Award (PRA) on the Internet at <http://www.ama-assn.org/med-sci/pra/prahdr.htm>. The form can be used in two different ways: (1) Use a browser to print the blank form. Fill it in by hand and fax or mail it back to the AMA for processing. (2) Fill in the form while online and send it to "summary." Then, using a browser, print the summary and fax or mail it back to the AMA for processing. A future version of this form will allow physicians to complete the entire process online.

■ **More than 300 guests attended the annual OSMA Medi**cal Student Picnic on August 31. This year the picnic was held at the Omniplex Science Museum and included all students, not just the freshmen class. Dr. Mary Anne McCaffree and Dr. John R. Bozalis welcomed the incoming class while students, family members, faculty, and OSMA officers and staff enjoyed an old-fashioned bar-b-q dinner. Garima Lal, state chair, and Betsy Jett, Oklahoma City Chapter chair for the Medical Student Section Committee, encouraged all students to join and support the OSMA.

■ **A coalition of health care associations has come together** to support a national policy and effective legislation to reduce tobacco use and to encourage President Clinton to lead the way in creating a new tobacco control policy for the nation. Coalition members anticipate that other organizations will join them as their movement gains momentum. "This is a singular, historic opportunity to protect children and save lives, and therefore the coalition is committing their resources, including our millions of members, volunteers and staffs, to this challenge."

The coalition includes: American Academy of Family Physicians, American Academy of Pediatrics, American Cancer Society, American College of Chest Physicians, American College of Preventive Medicine, American Heart Association, American Medical Association, Association of State and Territorial Health Officials, Campaign for Tobacco-Free Kids, National Association of County and City Health Officials, and Partnership for Prevention.

■ **The University of Alabama at Birmingham has deve**loped a catalog of smoking cessation materials aimed primarily at pregnant women and new mothers. The materials include smoking cessation program kits for pregnant women and brochures on the dangers of smoking. To order a free catalog, call the Wisconsin Clearinghouse form Prevention Resources at 1-800-466-1666.

■ **The next meeting of the OSMA Board of Trustees will** be at 9 a.m., October 19, at OSMA headquarters in Oklahoma City. The OSMA Executive Committee will meet the day before, primarily to interview finalists for the position of OSMA executive director.

■ **The Oklahoma Board of Medical Licensure and Su**pervision, in its newsletter *Issues and Answers,* reminds physicians that they are legally bound to report unprofessional conduct by a colleague. Oklahoma Administrative Code 435:10-7-4(42) includes as unprofessional conduct "Failure to inform the Board of a state of physical or mental health of the licensee or of any other health professional which constitutes or which the licensee suspects constitutes a threat to the public." And in OAC 435:10-7-4(43), "Failure to report to the Board unprofessional conduct committed by another physician."

AM News noted last spring in its Ethics Forum that physicians are ethically bound to report impaired colleagues because the welfare of the patient is paramount.

In other words, the article concludes, failure to report impairment of a colleague is both illegal and unethical.



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EDITORIAL

Telemedicine: Threat or Promise? 427
R.V. MCINTYRE, KINGFISHER

PRESIDENT'S PAGE

It Was a Very Good Year 429
D.M. SELBY, ENID

SCIENTIFIC

Seventy-Year-Old Man with Pulmonary Problems and Renal Failure: A Clinicopathologic Correlation Conference from the University of Oklahoma College of Medicine 431
G. KINASEWITZ, D. FINE, T.D. GOOD, B. EATON, F. SILVA, B. HUDSON; OKLAHOMA CITY

The First *In Situ* Split of a Liver in the USA Performed by Two Geographically Distant Transplant Centers—Enhancing, Sharing, and Expanding the Cadaveric Liver Organ Pool 442
E. KATZ, C.M. MILLER, B. NOUR, M. E. SCHWARTZ, A. SEBASTIAN, S. EMRE; OKLAHOMA CITY AND NEW YORK, NY

Vaginal Birth After Cesarean Section: A Comparison of Rural and Metropolitan Rates in Oklahoma 444
C.C. SIECK, ENID

COMMENTARY

An Essay on Managed Care and the Patient-Physician Relationship 450
W.A. GRANA, EDMOND

INDEX TO 1997 CONTENTS 465

NEWS

Brian O. Foy to become OSMA's executive director in January, 453... Oklahoma's new DNR Act effective since November 1, 453... AMA still answering Sunbeam questions, 455... The Oklahoma Telemedicine Act, 457... Changes in your Medicare pay, 463

DEPARTMENTS

Health Department, 458... Poison Control Center, 462... Letters, 462... Deaths, 464... In Memoriam, 465... Capsules, 468... Hassle Factor Log, 469... Classifieds, 470... Alliance, 478... The Last Word, 480



ABOUT THE COVER

Holiday greetings from "A. Willsmith Bear." Will was made by Carolyn Smith and photographed by her husband, Robert M. Smith, MD, Oklahoma City.

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Telemedicine: Threat or Promise?

The enhanced communication capability of current electronic media has produced a spate of discussion on the possible applications to the practice of medicine. There has been particular emphasis on the possibilities for rural medicine and in connecting the medical outposts of the world to the centers of medical knowledge. Even the politicians have weighed in with legislation expediting or subsidizing the connection process.

The era when Everyman can have electronic access to the Oracle of Delphi appears to be at hand. Today, we are most happy to note, the Oracle probably will dispense lifesaving or health saving knowledge. Telemedicine is advancing the day when technologically current medicine will be available to every patient everywhere.

The players in the telemedicine concept exhibit some anxiety as the adaption necessities thereunto appertaining become more evident. As with any technology advancement, some individuals will improve their lot while other individuals will lose something. That all the patients of the world gain something from telemedicine should now be the concern of the policy-molders of medicine.

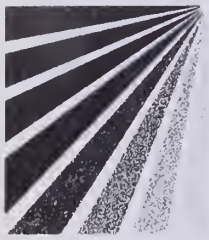
The legal ramification of the technology change in data transmission is an unknown quantity today, and a period of legal turmoil seems likely. But it is clear that the application of electronic media to the practice of medicine does not change the basic patient-physician relationship that must be the key element in the practice of medicine. In any era, improved communications always strengthen patient-physician rapport.

Another eternal verity is the constancy of human nature. Telemedicine will not alter the emotional constitution of the patient, the physician, nor the consultant. Also, the reaction of the human body to disease and injury in the Telemedicine Age will be the same as it was in the Antibiotic Age or the Hippocratic Age.

Thus we need not be anxious at the advent of telemedicine so long as we focus our adaptions to the goal that the individual patients are helped by the technical changes that we make. Telemedicine will be integrated into the practice of medicine, and mankind will be the better for it.

Ray V. McIntyre, M.D.

An editorial is a column of personal opinion that may or may not reflect the official position of the OSMA.



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It Was a Very Good Year...

As individuals we are often given to looking back this time of year... looking back at what we have done this year and at lessons learned for next year. As your president, looking back at OSMA's year, I have found a number of things worthy of note.



First, 1997 has been another banner year for PLICO, as it enjoyed a financial performance unequaled in the company's history. So far this year, the company's reserves have been increased by $6.6 million. This increase brings professional liability security for the physicians of Oklahoma to a level never before achieved. You now have $114.4 million in assets, reserves of $98.4 million, and capital of $16 million. PLICO's claim payment experience for 1997 is down $6.5 million for the 9 months ended September 30, compared to the same period in 1996. This performance will permit PLICO to maintain the same rate structure for professional liability for 1998 as in 1997. *There will be no rate increase for your liability policy in 1998.*

Today, PLICO policyholders have the only occurrence policy available in the country. And it is less expensive than the claims made competition. PLICO doctors have among the lowest rates for professional liability coverage in America. Most other companies started by physicians during the malpractice crisis of the mid-70s have become profit oriented. Your PLICO Board of Directors will continue to manage the company in *your* interests. We should all be proud and pleased with PLICO's performance in 1997, and we can be sure that our professional liability program is in its best condition ever.

On another note, we can look back at an exhaustive but successful search for a new executive director to guide the association into the next century. As I announced earlier, Brian O. Foy, executive director of the Westchester County Medical Society in Purchase, N.Y., has accepted our offer and will join us in January. His family will follow at the end of the school year in June.

An articulate young man, Brian brings to his post energy, enthusiasm, and order; experience in medical society leadership roles; a family heritage rooted in medical association work; and the discipline inherent in a military academy education. More about Brian appears on page 453.

Brian was one of several highly qualified candidates brought to us by the executive search firm of Witt/Kieffer, Ford, Hadelman, and Lloyd. The firm's due diligence in locating and referring to us the best of the best from across the country was both deeply appreciated and well worthwhile.

It is my very great pleasure to welcome Brian and his family to Oklahoma, to our medical community, and to our association. We have exciting times ahead of us as the association begins moving forward once again.

I would also like to extend special recognition to Kathleen A. Musson, our former director of operations, who has served so ably as acting executive director during our long executive search. She, with the support and assistance of our experienced staff, has kept the association up and running all this time. My compliments and appreciation to her and all our staff for their devotion and hard work.

The association's nationally known and often emulated Physician Recovery Program has also weathered a year of transition during which Dr. Harold Dean Thiessen served as interim director. His experience and leadership has contributed in no small part to the continuing success of our program. Consequently, I am especially pleased to tell you that he has been made director of the program by your Board of Trustees.

Without missing a beat, your landmark Physician Recovery Program will continue under Dr. Thiessen's outstanding leadership. We hope he will continue to serve in this capacity for many years to come.

And finally, we have upon us the AMA's Interim Meeting in Dallas, December 7-10. Your delegation takes with it ten resolutions to present to the AMA House of Delegates. These resolutions deal with universal access to medical care; professional courtesy; practice expenses; managed care "without cause" discharge provisions; evaluation and management services help for members; annual and interim AMA House of Delegates

meetings being certified as Category 2 Continuing Medical Education toward the AMA Physician Recognition Award; fraud and abuse; Medicaid managed care; and medical necessity coding.

We look forward to reports from our delegation on the success of these resolutions and on other issues confronting the AMA and will report to you as soon as that information becomes available.

As you can see, it's been a challenging year for the OSMA. We've come a long way in 1997, most of it up hill. But as the new year shines before us, we are on the move again. We've taken some big steps this year, and we've made a lot of progress. All in all, it's been a very good year for OSMA.

May you and your loved ones have a happy holiday season and a joyous new year.

And again, thank you for allowing me the privilege of serving as your president.

David M. Kelly, M.D.

Seventy-Year-Old Man with Pulmonary Problems and Renal Failure: A Clinicopathologic Correlation Conference from the University of Oklahoma College of Medicine

Gary Kinasewitz, MD; Douglas Fine, MD; Tina D. Good, MD; Bob Eaton, MD; Fred Silva, MD; Billy Hudson, PhD

Case Presentation

(Tina D. Good, MD, and Douglas Fine, MD, Department of Medicine)

History of Present Illness. A 70-year-old man presented in early summer in respiratory distress. He reported 3 to 4 months of progressive shortness of breath, cough, occasional hemoptysis; 2 to 3 months of anorexia; approximately 1 month of nausea with occasional vomiting; and 3 days of progressively severe acute dyspnea. He had been treated with Erythromycin and ampicillin without response. On the date of admission he was taken to another hospital where he was found to have severe metabolic acidosis, hypoxia, and hyperkalemia. He was transferred to University Hospital for emergency dialysis.

Past Medical History. The patient denied history of renal, cardiac, or pulmonary disease; hypertension, diabetes mellitus, or hepatitis. He denied intravenous drug usage, exposure to petroleum products or any other toxic fumes, or TB exposure. He had smoked >100 pack years. He had five children in good health.

Physical Examination. The patient was tachypneic (40 rpm) and tachycardic (120-130 bpm). His blood pressure was 150/90 mmHg. He spoke in 1-to-3-word phrases and was using all accessory muscles. Nares were patent without blood or other lesions. Oropharynx was clear. He did not have jugular venous distention. There were no murmurs, gallops, or rubs. Diffuse fine crackles were heard throughout both lung fields, without rhonchi, egophony, or dullness to percussion. The abdomen was soft, nontender, nondistended, without masses. Bowel sounds were hypoactive. Genital exam was unremarkable. Extremities were normal, without edema. There were no focal neurological deficits or asterixis. Moderate muscle wasting was noted throughout. Skin was moist without rash or other lesions.

Laboratory. (See Data Flow Sheet) WBC 22,900 (93% granulocytes); Hgb 8.3 g/dl; HCT 23.7%; Platelets 364,000. Na 139 mEq/l, Cl 104 mEq/l, CO_2 8 mEq/l, K 5 mEq/l; Glu 136 mg/dl; Cr 19.8 mg/dl, BUN 149 mg/dl. ABG: pH 7.08, HCO3 20 nmol/l, pO_2<40 mmHg, pCO_2 6 mmHg. Ca 10.3 mg/dl, PO_4 12.3 mg/dl. UA: negative glucose, bilirubin, ketones; pH 5.0; protein 3+; Uosm 353, Na 37, K 46.5, Cl 42, Cr 136.9, 10-20 RBC/HPF, 0-2 WBC/HPF. Portable chest x-ray showed bilateral pulmonary infiltrates without effusions. An EKG demonstrated sinus tachycardia with peaked T waves.

Hospital Course. On the day of admission the patient underwent emergent dialysis and was intubated for progressive respiratory failure. Over the first 48 hours he had poor oxygen exchange requiring FiO_2 0.60 and PEEP 5-8 cm H_2O. He had small amounts of blood suctioned from his endotracheal tube. He continued to have bibasalar crackles; his chest x-ray appeared to worsen. Soon after admission, he became progressively febrile. Subsequently obtained old records revealed that he had had a normal creatinine and BUN one

University of Oklahoma College of Medicine Clinical Pathological Correlation Conference, January 29, 1997.

Direct correspondence to Fred Silva, MD, Chair, Department of Pathology, University of Oklahoma College of Medicine, P.O. Box 26901, BMSB 451, Oklahoma City, OK 73190.

year prior to admission; a right vocal cord paralysis diagnosed one year prior to admission; and normal blood pressure six months prior to admission. Bronchoalveolar lavage on the third hospital day revealed old hemorrhagic material and purulent secretions. The patient was placed on trimethoprim-sulfamethoxazole empirically with the consideration of pneumocystis pneumonia (as well as broad spectrum antibiotics due to the suspicion of bacterial pneumonia and/or sepsis). He decompensated after his bronchoalveolar lavage and was diagnosed with adult respiratory distress syndrome. Renal biopsy was performed on the fourth hospital day. Later that same day the PCP-DFA from the BAL was negative and trimethoprim-sulfa was discontinued. The patient was treated with Cytoxan, high-dose steroids, and plasmapheresis. He continued to require intermittent dialysis. His respiratory and renal status continued to deteriorate; the family eventually chose to withdraw heroic measures, and the patient expired on the 16th hospital day.

Patient Data Flow Sheet

Date	**6/10**	**6/12**	**6/17**	**6/19**	**6/23**	**6/25**
Intervention	Hemodiolysis	Cytoxon, Steroids		Plasmo Exchange		
Hgb	8.3	8.5	6.3	8.1	9.5	8.6
Hct	23.7	24.3	18.4	23.0	27.8	25.0
WBC	22.9		14.7	16.6	18.0	14.8
Platelets	364	206	>200	165	21	29
PT/PTT	13.6/25	14.2/24	14.1/27	13.9/33		13.7/55
Na^+	139	144	138	138	146	143
K	5.0	3.5	6.6	5.5	5.2	6.1
Cl	104	96	89	89	96	96
CO_2	8	29	21	25	27	21
Glucose	136	118	150	206	188	86
Creat	19.8	10.5	14.5	9.8	5.4	7.4
BUN	149	83	183	197	101	156
Ca^{++}	10.3	8.4		9.4	7.8	8.8
PO_4	12.3	4.3		7.1	8.5	12.2
Alb/TP	3.6/	2.9/5.9		2.4/4.9	3.6/4.5	3.0/4.3
Bilirubin	0.7	0.9		0.6	1.0	1.3
SCOT/SGPT	29/13	35/20			12/17	51/29
Alk. Phos.	107	140			80	
CPK	316	113			15	
pH	7.08	7.47		7.37	7.29	7.29
pCO_2/pO_2	20/40	42/64		47/91	56/56	39/52
$HCO_3/\%O_2$	6/RA	3l/$FiO_2$60%		28/	27/$FiO_2$70%	19/$FiO_2$100%
Urine Prot	3+					
CeUS	10-20RBC					
Misc	$NH_3$30	C3 97	AntiGBM(-)			BAL(-)
	Mg 2.5	C4 28		Mg 3.3		
	Loctic Acid 3.0	Cryo (-)				
	Cold ogglut (-)	ANCA (-)				
		ANA (-)				
		dSANA (-)				
		HIV(-)				

Questions regarding the case:

Dr. James Pederson:
Q: ***What was the method for the anti-GBM assay? Was that an indirect or an ELISA assay?***
A: We have that done at Scripps. It is an ELISA.

Dr. Leann Olansky:
Q. ***Was a PTH level obtained?***
A. No.

Radiology

(Bab Eaton, MD, Department of Radiology)

We have a series of portable chest x-rays. The first is dated June 6, 1996. His heart is slightly enlarged and the aorta is mildly tortuous. The main finding is airspace consolidation in both lungs extending from the hilum to the pleura bilaterally. It is fairly symmetrical with some sparing of the apices. On June 12, he had a CT of his neck where we are able to see about 5 images of his upper lung which show normal pulmonary arteries into the upper lobes. These images show peripheral air space consolidation which tends to be more in the anterior portions of the lungs. The portable x-rays look similar throughout the course. The last film we have, however, does show a very large area of increased airspace consolidation with air bronchograms throughout the right lung. The right heart border and the anterior portion of the right side of the diaphragm is obscured, indicating involvement of the middle lobe (Fig.1).

Throughout this patient's course, we were thinking of pulmonary edema or a diffuse viral pneumonia. It is a little bit unusual for pulmonary edema in that the periphery of the lung seems to be involved as much as the perihilar area. Other possibilities would be alveolarized blood and virtually anything else which would cause airspace consolidation.

Case Discussion

(Dr. Gary Kinasewitz, Chief of the Section of Pulmonary Diseases and Critical Care Medicine)

In essence, we have a 70-year-old gentleman who presents with a 3-to-4 month illness characterized by respiratory symptoms including hemoptysis and progressive dyspnea. During his last month he had anorexia and malaise which I attribute to his uremia. On presentation it is noteworthy that, despite the fact he is in respiratory distress, he has no evidence of congestive heart failure and no evidence of involvement of any other organ other than his lungs and his kidneys. His laboratory data, I'm not going to make much of. It is the typical metabolic acidosis one would expect in someone with renal failure. As noted, he also is inappropriately hypercalcemic, which I attribute to secondary hyperparathyroidism, and is anemic which I attribute to decreased erythropoietin production, telling us he had been in renal failure for some months.

Moving on, his blood gases show severe hypoxemia with a respiratory compensation. I would actually expect a little bit more compensation for his degree of hypoxemia and wonder that he is in the terminal stages of respiratory insufficiency. The slight elevation in lactate is probably due to the hypoxemia. His urinalysis is not particularly helpful in someone with a creatinine of 20. The absence of red blood cell casts I attribute to the fact that it was not reviewed by a nephrologist who sees red blood cell casts all the time. His EKG is helpful only in that it doesn't show LVH or signs of pericardial disease. His chest x-rays show a diffuse bilateral alveolar pattern and I think the first thing we need to think about in a patient with uremia is congestive heart failure and volume overload.

However, his physical examination didn't go along with CHF. There is no evidence of effusions. In the left lung where you can see the pulmonary vessels, they don't appear to be enlarged. On a portable film I don't think that is significant cardiomegaly. Plus, I am sure that some evaluation of his left ventricular function was done during his hospitalization. I suspect that it was normal.

The second thing one would consider is infection. Against that in this particular patient is the fact that the process has been ongoing for months. Infection associated with hemoptysis is due to necrotizing lung disease and I don't see evidence of any cavitary disease. I think the first clue to the underlying disease appears during the intubation. Knowing that Dr. Good performed it, I am sure it was a non-traumatic intubation and if she saw blood, there was blood-alveolar hemorrhage.



Figure 1. Chest x-ray of the patient after admission.

Clues to alveolar hemorrhage are indicated in Table 1. Certainly the presence of air space disease in a patient with

hemoptysis, particularly if, as the air space disease increases, the hemoglobin decreases, is a clue. When it is chronic, it may be associated with an iron-deficiency anemia, though in this patient, his indices were not microcytic or hypochromic. The sputum often reveals hemosiderin-laden macrophages which are the mechanism by which blood is cleared from the alveolar space. In a stable patient who can go to the pulmonary function lab, you will find an unexpectedly high DLCO carbon monoxide. Normally we measure the uptake of carbon monoxide to reflect oxygen uptake within the lungs, but with alveolar hemorrhage the blood within the alveolar space also takes up carbon monoxide. People have proposed this test as a method of monitoring patients with alveolar hemorrhage syndrome. However the diagnosis, in my mind, was established by the persistent suctioning of blood. Blood after a traumatic intubation usually clears within hours. The finding of hemosiderin-laden macrophages and the characteristic pattern on BAL clinches the diagnosis. If it is endobronchial blood, as you successively lavage, the blood will clear. If it is coming from the alveolar air spaces, the effluent may become more bloody as you progress. Having diagnosed alveolar hemorrhage, what do we do? I think the man was in the appropriate place he needed to be, a tertiary care hospital.

What causes alveolar hemorrhage? Being a pulmonologist I am going to approach this from the pulmonary standpoint. There are a number of syndromes associated with alveolar hemorrhage (Table 2). The first, idiopathic pulmonary hemosiderosis, is as its name implies, of unknown etiology. It is a disease of children. Eighty percent are less than 16 years of age. It has been reported in adults. Most importantly for our consideration, it doesn't occur with renal disease, so we have discarded that diagnosis.

Table 1. Clues to Alveolar Hemorrhage

Airspoce disease with frank hemoptysis
Rapid fall in hemaglabin
Iran deficiency anemia
Hemasiderin laden macraphages
Increased D_LCO
Branchaalvealar lavage

Table 2. Alveolar Hemorrhage Syndromes

Idiapothic pulmanary hemasiderasis
Gaadpasture's syndrame
Pulmonary vasculitis
Wegener's granulamatasis
Systemic vasculitis
SLE
Other
Idiopothic rapidly progressive glamerulanephritis
Toxic

Toxic alveolar hemorrhage has been reported after inhalation or exposure to a number of substances. It can follow inhalation of trimellitic anhydride which is used in the manufacture of epoxy or resin. It has been reported after azathioprine therapy in a patient who has had a kidney transplant. It has been reported after lymphangiography. The only toxic cause I know that is associated with renal disease is that reported after D-penicillamine therapy and to our knowledge the patient had not taken that. So we have excluded two of six possibilities.

Let's focus on the last four. In my mind there is Goodpasture's or antiglomerular basement membrane disease. There are a number of forms of pulmonary vasculitis. Wegener's granulomatosis is the first to come to mind. There also are Churg-Strauss allergic granulomatosis, lymphomatoid granulomatosis, and necrotizing sarcoid granulomatosis. Only Churg-Strauss of the latter three is associated with renal disease and, to my knowledge, it has never been reported with the syndrome of alveolar hemorrhage and renal failure. When we talk about pulmonary vasculitis, we will be talking about Wegener's granulomatosis. SLE is the prototype of systemic vasculitis, but virtually every kind has been reported with alveolar hemorrhage. Lastly, and hopefully there won't be much time left, I will touch on the entity of idiopathic rapidly progressive glomerulonephritis as a potential cause.

Patients with Goodpasture's disease tend to be young males. In a large series of 29 patients, there was a 2-to-1 male predominance[1] but some series have reported as high as 5-to-1 male predominance.[2] They are young—76% are less than 27 years of age—but there is a wide age range. The fact that our patient was 70 doesn't exclude him. Attempts to reproduce this syndrome in experimental animals by injecting sera were frustrated until investigators learned they had to damage the alveolar basement membrane. In experimental animals they did it by having animals inspire 100% oxygen. Clinically we see that a large number of people who present with this syndrome work in occupations where they are potentially exposed to hydrocarbon fumes. In a significant number their illness will be initiated by what is thought to be an upper respiratory tract illness.[3] Generally, although the average duration of symptoms is about 6 months, 62% are symptomatic for less than 3 months, so certainly our patient is in this ballpark of 3 to 6 months.

What do they present with? The overwhelming majority come in complaining of hemoptysis and shortness of breath. Symptoms referable to renal disease are also present. They have nausea and vomiting and hematuria in about 42%. The fatigue may reflect anemia or shortness of breath and it is not uncommon that they are febrile, some will have lost weight. If we look at their chest x-rays, almost invariably there is an infiltrate present. As we noted, they are anemic. Leukocytosis as seen in our patient is not uncommon. Of all the entities we will talk about, Goodpasture's or antiglomerular basement membrane disease is the one that is most likely to have the patient present

with significant renal failure, a creatinine of greater than 6 or BUN greater than 120. The diagnosis of this syndrome has been facilitated by the recognition that most of these patients will be antiglomerular basement membrane antibody positive. Recently the antigen that reacts with this antibody has been recognized to be a 17 amino acid peptide sequence in the noncollagenous globular end of Type IV collagen, which is present in both the glomerular basement membrane and also within the lung.

In contrast to patients with Goodpasture's syndrome, patients with Wegener's granulomatosis tend to be a bit older. The average age in the NIH series was 41 years with a wide range.[4] The sex distribution was roughly equal. These patients are symptomatic for about five months, on average, but again, the range was wide and some patients had symptoms for as long as 16 years. What do they come in with? Well, 3 out of 4 patients present complaining of some ENT problem, whether it be sinusitis, otitis, or nasal problems. This is incredibly common. About half of the patients will have an abnormal chest x-ray, but half of that half will be asymptomatic. Only 20% complain of cough, and hemoptysis is present in only about 10%. This would place our patient in a minority status in this group. Arthralgias and fever are common. Renal failure is seen in only about 20% upon presentation. Now, as the disease progresses, roughly 90% will have ENT manifestations, 85% will have pulmonary symptoms, and 80% will have renal failure. But, hemoptysis and renal failure on admission are unusual.

The recognition of Wegener's granulomatosis has been facilitated by the recognition that these patients' sera contain antibodies against a cytoplasmic protein in neutrophils.[5] This antibody binds to a serine protease, PR3. When it initially was identified, most people thought it was an epiphenomenon, but actually it may play a physiologic role. When neutrophils are activated, PR3 is expressed on the cell surface.[6] In addition, it has recently been shown that human endothelial cells stimulated with TNF will also express PR3 on their surface. So in Wegener's granulomatosis, which is the classic Type IV hypersensitivity reaction mediated by lymphocytes, this ANCA antibody may actually be pathologic. This cytoplasmic c-ANCA pattern is in contrast to the p-ANCA pattern or perinuclear pattern, which is due to antibodies to myeloperoxidase and other cationic proteins within the neutrophil. When you fix PMNs in alcohol, the cationic proteins migrate toward the negatively charged nucleus and tend to clump around it, giving you intense nuclear staining. p-ANCA is not found in patients with Wegener's granulomatosis but is fairly common in patients with other forms of vasculitis. If we look at the c-ANCA pattern in patients with active Wegener's granulomatosis, and I would certainly characterize our patient as having active disease, 88% of them should be c-ANCA positive. In inactive disease the number of positives falls to 43%, and it is not as helpful.

I use lupus as the prototype of systemic vasculitis. I culled 24 case reports since 1970 reporting alveolar hemorrhage in patients with lupus. To put it in perspective, Marino and Purser from Downstate New York reported 140 patients over a two-year period whom they followed in their clinic. Twelve were admitted to the hospital for pulmonary disease, but only three had alveolar hemorrhage syndrome. So that is about a 1% per lupus patient per year incidence of this syndrome. The patients are typical lupus patients. They are young females, they virtually all have active disease, they all have renal disease, and immune complexes are readily appreciated. They are not patients presenting with cryptogenic alveolar hemorrhage and SLE. Note also that the mortality in these patients is incredibly high, exceeding 60%. Other systemic vasculitides have been reported to cause alveolar hemorrhage. Behçet's disease is associated with about a 5% incidence of pulmonary hemorrhage. Polyangiitis overlap syndrome (which is what a pulmonologist calls polyarteritis that involves the lung) is often associated with a positive p-ANCA and occasionally alveolar hemorrhage. Mixed cryoglobulinemia and hypersensitivity vasculitis may be associated with alveolar hemorrhage. However, this occurs in patients who have clinically obvious vasculitis. We will come back and apply that to our patient in a minute.

Lastly, let me touch upon the entity of alveolar hemorrhage in glomerulonephritis. I think the recognition was first made by McCaughey and Thomas in the early 1960s when they reviewed 250 autopsies of patients with glomerulonephritis.[8] They found roughly 10% of the patients had acute alveolar hemorrhage at the time of death and another 6% had old alveolar hemorrhage.

When they looked at the histological types of glomerulonephritis, 38 of the 252 or 15% of the patients had either focal or diffuse necrotizing glomerulonephritis. Remember, this is in the pre-EM, pre-immunofluorescent era. Of these 38, 22 of the patients also had evidence of alveolar hemorrhage from which they concluded (they suggested most of these patients had vasculitis) that alveolar hemorrhage was rare with other forms of glomerulonephritis or tubular necrosis. Let's look at how common alveolar hemorrhage is in

Table 3. Alveolar Hemorrage Syndromes: Frequency

	USA[1] n-25	Australia[2] n-45	Sweden[3] n-40	Total n-110
Anti-GBM	10	8	7	25 (23%)
Wegener's	4	7	7	18 (16%)
Systemic vasculitis	9	29	25	63 (57%)
Idiopathic RPGN	2	1	1	4 (4%)

[1]Medicine 63:343, 1984; [2]Am J Kidney Dis 8:31, 1986; [3]J Int Med 238:143, 1995

Table 4. Our Patient

	anti-GBM	Wegener's	Systemic Vasculities	Idiopathic RPGN
Frequency	23%	16%	57%	4%
Age	±	±	±	±
Sex	+	±	±	±
Duratian Sx's	±	±	±	±
AH/Renal only	+	±	-	+
Creat. >6mg/dl	+	±	±	-
Serolagy	-	-	-	+

idiopathie, rapidly progressive glomerulonephritis. Three different series from the United States, Australia, and Sweden are summarized in Table 3.[9-11] The most eommon eause is systemic vasculitis, which is responsible for roughly three out of every five eases. If we have five patients, three will have systemie vaseulitis, one will have Goodpasture's, and one will have Wegener's granulomatosis. An oeeasional outlier will present with idiopathie RPGN.

How do we evaluate the patient with alveolar hemorrhage? We evaluate them just like this patient was evaluated. In the history and physical you are looking for cvidenee of vasculitis and involvement of other organs. Laboratory testing should include assays for antiglomerular basement membrane antibodies, ANCA testing, as well as serologieal testing looking for other evidence of vaseulitis, ineluding ANA, eomplement levels (helpful if they are depressed), hepatitis virus, eryoglobulinemia, ete. Ultimately, if these are negative, renal biopsy ean be diagnostic. Even if these are positive, renal biopsy can be prognostic. As in this patient, I bclievc the appropriate next step is renal biopsy. If your renal biopsy shows nonspecifie vaseulitis, then it may be helpful to do a lung biopsy looking for evidence of Wegener's granulomatosis. It depends upon the severity of the disease and your approach to treatment. Lately, the NIH group has shown that the combination of steroids and cytotoxie therapy is extremely effective in the treatment of Wegener's granulomatosis. This has been extended to other forms of vasculitis. Plasmapheresis was first reported in Goodpasture's patients with cireulating antibodies and it was shown to be benefieial.[12] The mortality, which was in the range of 60% to 70%, was reduced to about 15% in patients with Goodpasture's. Nonetheless, about 30% of the patients will progress to end-stage renal disease. This therapy has been extended to patients with immune complex glomerulonephritis, despite the absenee of trials showing that it is benefieial. The rationale is to remove the ineiting agent at the same time you are suppressing its further production.

My thinking about this patient is summarized in Table 4. If we are just going to play the odds, this patient has systemie vasculitis of some kind. The patient's age is not particularly helpful beeause he is an outlier for all of these entities. While Goodpasture's is predominately male, it would be more helpful if he were female and I eould exelude Goodpasture's. Certainly there are more males with vaseulitis than there are who present with Goodpasture's. Again, the duration of his symptoms is typieal for most of these syndromes. Had it been explosive and two weeks' duration, then I would be thinking more in terms of Goodpasture's or systemie vaseulitis.

The first thing that is really helpful is the faet that our patient has disease limited to his kidneys and his lungs. In general, people with systemic vasculitis have other evidenee of systemie vaseulitis. The hooker here is, I am not sure what to make of his vocal eord paralysis. I think it is true-true-unrelated, but it sort of gives you a little nudge and is disturbing. Again, the faet that he presented with severe renal failure is in favor of Goodpasture's disease. Serologieally, it is diseoncerting that he had no positive serology. However, remember about 15% of these patients, about one in six, will be scrologically negative at the time of presentation, even in the presenee of active disease. I now am going to prove to you that I don't know the diagnosis, but if I were to bet, I would think Dr. Silva is going to show us some linear fluoreseenec rather than neerotizing granulomatous inflammation.

Pathology

(Fred Silva, MD, Department of Pathology)

The renal biopsy was a generous biopsy with 15 glomeruli and 80% of those were totally globally sclerotic. That eertainly is in accord with the patient's chronic renal disease. What one needs to do is to not only look at the globally sclerotic

glomeruli but to also study the mildest, earliest glomerular involvement, and there was still some activity and there was some segmental proliferation and necrosis in one of the 15 glomeruli; in one other of the 15 glomeruli there was a relatively fresh cellular crescent (Fig. 2). So there was a global selerosing glomerulonephropathy, advanced stage, but there was still some activity with neerosis and crescent formation. There were widespread breaks in the Bowman's capsule, a sign of severe past crescent formation.

We thought this patient had a poor renal prognosis. Not only because 80% to 90% of the glomeruli had crescents, but also because there was advanced interstitial fibrosis, tubular atrophy, vascular disease, and that he came in with a serum creatinine of about 16. All those features are certainly in favor of a very poor renal prognosis. Electron microscopy was negative—there was no evidence anywhere of discrete electron-dense immune complex deposits. Immunofluorescence (IF), however, did show, as Dr. Kinasewitz predicted, intense linear IgG along all glomerular capillary walls (Fig. 3). I have seen immunofluorescence on over 1000 kidneys and of those, I've seen three cases of anti-GBM (glomerular basement membrane) disease; it is a very rare disease.

This patient's kidneys had more severe staining than I saw in those three anti-GBM patients. There was some staining for C3, but albumin was completely negative by IF. That is important because you can have non-specific non-immunologic linear staining, but it is almost always seen with other specific immune complex diseases, other vasculitides or with concomitant strong albumin staining (as in diabetes mellitus). Thus, the linear staining we see in this patient is interpreted as specific and diagnostic of GBM-bound anti-GBM antibodies.

Crescents have been described since the time of Langhans, who described them about 120 years ago. Crescents form in Bowman's space when there are major breaks in the GBM, through which fibrin and other growth proteins come into Bowman's space and elicit both parietal epithelial cell proliferation and migrant monocyte infiltration through the breaks in the GBMs (and possibly Bowman's capsule). If you look at kidney survival over years you will see that the renal disease that has an even worse renal prognosis than amyloid or severe lupus nephritis is crescentic glomerulonephritis.

There are at least three pathogenic types of crescentic glomerulonephritis: (1) circulating immune complex—we have no history or confirmatory findings for that; (2) anti-GBM—we have very good evidence for anti-GBM antibodies bound to the GBM; (3) and pauci-immune glomerulonephritis—with no major deposits by EM or IF. We have learned in the past ten years that 80% to 90% of those negative cases are ANCA (antineutrophil cytoplasmic antibody)-related and associated with vasculitis. Our patient had Goodpasture's disease—anti-GBM-induced glomerular disease. The patient unfortunately died.

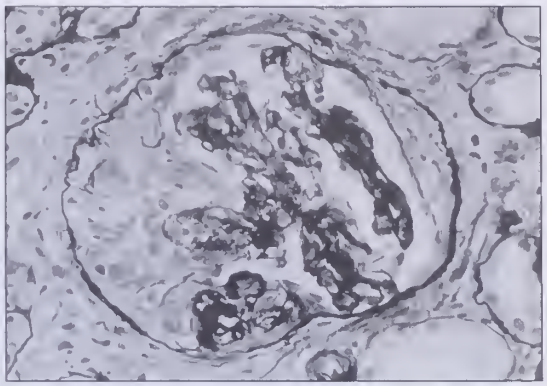


Figure 2. Light micrograph af renal biopsy shawing o single glomerulus with a large crescent filling part of Bowmon's space. (Silver methenomine; 40×)

At autopsy we were allowed to remove and study only two organs, so I can't tell you about his vocal cord paralysis. Both lungs were extremely heavy, weighing 1,800 and 1,200 grams each (normal, 350 grams). They were solidified with abundant blood oozing from the cut surfaces. On section the cut surface was brick red in color and hemorrhagic fluid could be easily expressed from the bronchi. "The lung gave the impression of having been injected with blood through the bronchi so that all the air spaces were filled." "Microscopically, sections of the lung show a tremendous amount of blood in the air spaces. Alveoli and terminal bronchioles were filled with erythrocytes." Those words in quotes are not mine, but were written three-fourths of a century ago by Ernest Goodpasture when he described in 1919, in the midst of an influenza epidemic, an 18-year-old seaman who was different than all the other patients he saw at the time; we now know that as Goodpasture's syndrome. Dr. Goodpasture's description fits our patient well, though his description was more than 75 years earlier.

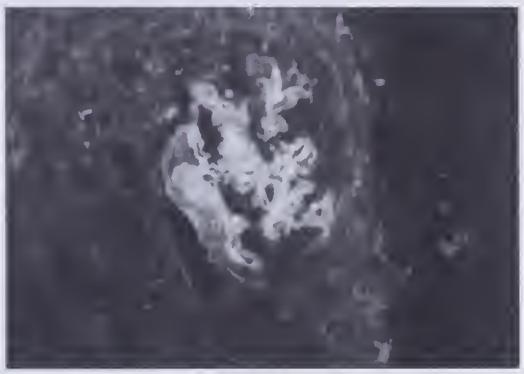


Figure 3. Immunofluorescence microscopy. There is intense linear staining olong oll glomerular copillory wolls for anti-IgG. (Anti-IgG; 20×)

Our patient's intra-alveolar hemorrhage was both acute and chronic; there was a massive amount of hemosiderin deposition throughout the interstitial spaces and the intra-alveolar spaces. Focally the alveoli, again in Goodpasture's words, were "filled with plugs of fibrin and in certain areas there is a great abundance of hyaline material upon the walls of the dilated alveolar ducts

and alveoli." This is evidence of diffuse alveolar damage.

This patient also had widespread acute bronchial disease with large numbers of acute inflammatory cells (polymorphonuclear leukocytes) in/around the bronchi and this exudation continued into the adjacent air spaces. There was widespread necrosis of the bronchi (acute bronchopneumonia). The pulmonary hemorrhagic disease was a chronic disease as demonstrated by many pulmonary arteries showing marked intimal thickening; I suspect the pulmonary disease was indeed around for at least six months. There was also linear staining of the pulmonary basement membranes by IF, which is in accord with the anti-IgG renal staining.

Kidneys at autopsy showed a progressive disease and what Goodpasture initially described years ago. By autopsy almost all the glomeruli were globally sclerotic "tombstones" of even more advanced renal disease. There were still remnants of fibrocellular crescents and fibrous crescents, but 95% of the glomeruli were in the process of being totally destroyed.

An important feature was that we did see several glomeruli that were completely normal by light microscopy. That is important because you will not have normocellular glomeruli in general in typical circulating immune complex glomerular disease. Immune complex disease (like SLE or IgA nephropathy) usually produces an intracapillary hypercellularity of a glomerulonephritis, so I think that not only by EM and IF but by light microscopy we excluded a circulating immune complex pathogenesis in this patient. There was no evidence of vasculitis in either of the organs we studied.

There was marked linear immunofluorescent staining in all the autopsied glomeruli. Every glomerulus had a 4+ out of 4+ intense linear capillary wall staining. Thus, we have the diagnosis of GBM-bound anti-GBM antibodies. There was some fibrin in the crescents as you would expect.

After Dr. Goodpasture's initial description, it took another 40 years to assemble 20 more published cases, and in 1958 two Australians named Drs. Stanton and Tang suggested that it was preferable to distinguish this syndrome of pulmonary hemorrhage and glomerulonephritis according to the author's and discoverer's name. Since that time it has been termed Goodpasture's syndrome. It took yet another nine years until Drs. Lerner, Dixon, and Glassock discovered that the pathogenetic mechanism in many cases of Goodpasture's syndrome was that there was an antibody circulating and binding to a glomerular basement membrane antigen. It is now known that this antibody reacts to a normal tissue-bound antigen called Goodpasture's antigen in the glomerulus and that is one of the major human forms of *in situ* immune complex formation. It is not a *circulating* immune complex disease, because only the antibody circulates. The elucidation of this antibody became the experimental tool that led to the discovery of a whole new family of Type IV collagens. One of the reasons that we present this CPC is because it brings together the basic science and clinical science quite well.

There are 19 types of collagen and the family of six chains that make up Type IV collagen. Dr. Billy Hudson, professor and chair of the Department of Biochemistry and Molecular Biology, University of Kansas Medical Center, is the authority on the biochemistry and molecular biology of Goodpasture's antigen. Dr. Hudson has been gracious enough to attend this CPC and will discuss Goodpasture's antigen, what it is, and how we get the disease.

Basic Science

(Billy Hudson, PhD, Department of Biochemistry and Molecular Biology, University of Kansas)

Goodpasture syndrome is characterized by glomerulonephritis and pulmonary hemorrhage, which are mediated by autoantibodies that are targeted to glomerular and alveolar basement membrane. When the antibodies cause glomerulonephritis or pulmonary hemorrhage by themselves, the disorder is referred to as anti-basement membrane disease. Over the last decade, searches for the identity of the target basement membrane component led to the discovery of the α3(IV) and α4(IV) chains of type IV collagen[13,14] and the identification of the α3(IV) chain as the target autoantigen (Fig. 4). The existence of the α3(IV) chain was recently verified by molecular cloning.[15] The identity of the α3(IV) chain as the Goodpasture autoantigen was verified on the basis of autoantibody binding to recombinant NC1 domains[16] and by analysis of the antibody specificity from a large number of patients.[17]

On the basis of the findings, the classification of anti-basement membrane disease and Goodpasture syndrome as anti-type IV collagen disease was proposed.[17]

The epitope for Goodpasture antibodies has been localized to the carboxyl terminus of the NC1 domain of the α3(IV) chain, encompassing the last 36 residues as the primary interaction site.[18] The epitope is sequestered within the NC1-NC1 junction of two adjoining triple helical monomers. Upon disruption of the conformation and/or quaternary structure of this region by protein dena-

turants, the epitope is unmasked and becomes accessible for binding Goodpasture antibody.[19] Unmasking of the epitope by infection or organic solvents, events which are thought to precede Goodpasture syndrome, may play an important role in the etiology of the disease.

The discovery and identification of the α3(IV) chain as the Goodpasture autoantigen has subsequently led to the discovery of three additional chains. Type IV collagen has now emerged as a family of six genetically distinct chains, designated α1 to α6.[20] These chains have a tissue-specific distribution in which α1 to α5 chains comprise the GBM and the α1 and α2 chains comprise the mesangial matrix of the glomerulus.[21] Of particular note, mutations in the genes encoding the α3, α4, and α5 chains are the underlying cause of Alport hereditary nephritis.[20]

Questions from the Audience

Q. ***The test for antiglomerular basement membrane antibody is among the most specific and the most sensitive that we use clinically. So for this patient to have strongly positive linear staining in the face of negative serum laboratory tests, I would wonder about the laboratory and whether that specimen was mixed up.***

A. You are absolutely right. The sensitivity is usually 90%, but there are 5% to 10% of the times where we have an absolutely classical history, light microscopy, crescentic and necrotizing glomerulonephritis with intense, strong linear IF staining, no other disease, no albumin by IF, and yet the anti-GBM radioimmunoassay test is negative. I discussed this with Dr. Curtis Wilson at Scripps. We all have seen an occasional patient in which the anti-GBM antibody failed us. There are three reasons the antibody test can fail us, in addition to the laboratory error. One is duration of disease. Depending on the assay, there is some evidence that the anti-GBM disappears in the serum a lot before it disappears in the glomerulus. It can disappear at six months, although it usually takes 14 to 16 months to disappear in the serum. We know this patient had pulmonary disease for at least six months, maybe more. Secondly, the circulating antibody could be totally absorbed by the glomerulus on its first pass through the glomerulus. There is good evidence that 80% of what circulates can be absorbed on first pass by the glomerulus. There is just nothing left to detect in the serum. Treatment can alter the antibody level and cause a blip, a divot as Wilson says, in the assay, but this patient wasn't treated. The third problem could be the assay. From lab to lab these anti-GBM radioimmunoassays are dependent on a number of factors day to day. An absence of proof is not the proof of absence, and a negative lab test, even from the best lab in the world, does not give you the absolute answer necessarily.

This patient was cared for in the hospital by Dr. Kai Lau. Would you like to make any comments Dr. Lau?

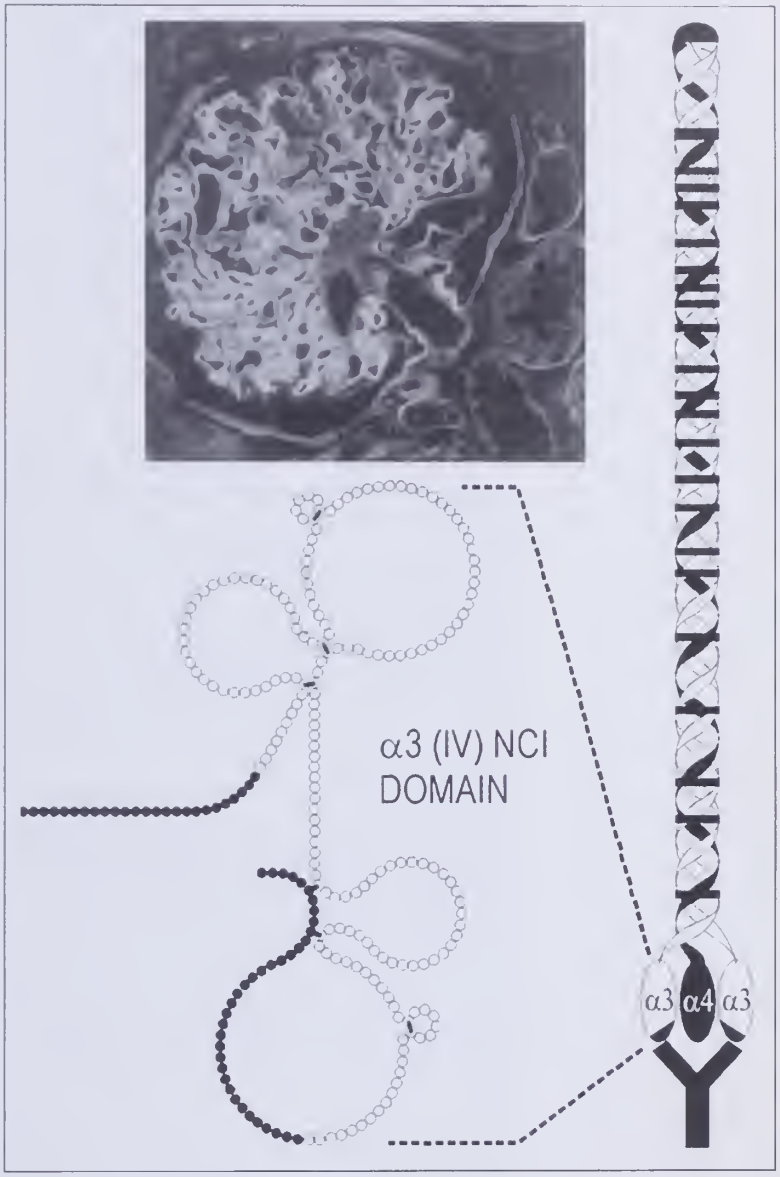


Figure 4. Schematic illustration of the α3(IV) chain as the target autoantigen for Goodpasture autoantibodies. The Goodpasture autoantibodies bind linearly to GBM of the renal glomerulus (photomicrograph, top). Within GBM, the autoantibodies are specifically targeted to the α3(IV) chain. This chain is assembled into triple helical molecules exemplified by the $(\alpha3)_2(\alpha4)$ isoform. The epitope for the autoantibodies is located within the α3NC1 domain and is sublocalized to the last 36 amino acid residues (*closed circles*) at the carboxyl terminus. The NC1 domain has two homologous subdomains, a feature that is common to the NC1 domain of all six α(IV) chains. The folding of the NC1 domain, defined by the six loops, is formed by six disulfide bonds.

Dr. Kai Lau:
We had considered a similar set of differential diagnoses as was discussed. However, we were not absolutely certain we could exclude Wegener's granulomatosis because the ANCA was negative. This is because a negative test for anti-GBM and ANCA could happen in a patient with biopsy-proven anti-GBM disease and Wegener's granulomatosis, respectively. In terms of management, while the definitive diagnosis was pending, we first excluded sepsis, pulmonary edema second, then we waited for serology tests to come back while we empirically gave Cytoxan, steroids, and performed exchanges of plasma on the outside chance that he had a treatable disease and that his kidney or lung function would improve despite the advanced stage of dysfunctions and the chronicity by history. Those were essentially the basic principles of managing a patient with such a severe multi-organ disease such as his.

Dr. Silva:
I think I should warn you that it appears that there is another wildebeest or animal out there. That is, there seem to be a few patients, and all of us have seen them, in which there is a necrotizing and crescentic glomerulonephritis, and it is none of the three types of diseases (anti-GBM, circulating immune complex, or ANCA-associated as noted above). It is non-A, non-B, non-C; it is not circulating immune complex, it is not anti-GBM, and it is not ANCA. They don't have anti-endothelial antibodies either, and we have no idea what those few cases are due to.

Q. ***Dr. Lau, since you were the nephrologist involved, was any thought given to the possibility of nephrectomy, given his end stage kidneys, as a method of ameliorating his disease?***
A. We had not thought much about nephrectomy because of three reasons. First, things were happening very fast. The most life-threatening organ dysfunction, the lung, dictated prompt intubation and optimizing oxygenation. This was the first order of business. Second, it is controversial and certainly unproven that bilateral nephrectomy would reverse the outcome of patients with proven anti-GBM disease of the lungs and kidneys. The anecdotal experience was not controlled. One could be concerned that without the kidney as the target (sink) for the anti-GBM antibodies, the lungs could be even more vulnerable and severely affected. Third, he was too sick to undergo major surgery like bilateral nephrectomy. We thought the best way to reduce the antibody titer was plasma exchange. We were puzzled by the negative anti-GBM and ANCA tests, but we also recognized that 5% to 20% of those tests could be negative even during the acute illness. He was very moribund. We had to do the kidney biopsy at the bedside. In any case, we did not seriously consider nephrectomy for these three reasons.

Q. ***Dr. Hudson, why is the disease in the kidneys and lungs? Don't we have Type IV collagen elsewhere?***
A. That's a good question. Type IV collagen is found throughout the body and underlies all epithelial cells. However, there is a tissue-specific distribution of the six α chains of type IV collagen. The α3 chain is located only in certain basement membranes such as the GBM and alveolar basement membrane. Thus, the anti-α3 antibodies of Goodpasture patients bind to those membranes that contain the α3 chain. Part of the reason for the kidney/lung involvement may also relate to the accessibility of the Goodpasture antigen in these tissues to binding of the autoantibody.

Q. ***Were there any antibodies in the lungs?***
A. Let me give you a disclaimer. Yes, there was intense staining in the lung, in the pulmonary basement membranes in a linear fashion for IgG. The problem is even though I've done a thousand kidney immunofluorescent studies, if you ask me how many lungs I've done, I would have to tell you it's a couple of handfuls—less than 10 or 12. So we don't have great experience doing lung IF. The reason why that is important is that you can have some innate autofluorescence, as you know, in the lung unrelated to true antibody deposition. So you have to gauge the IF staining very carefully, but it was interpreted as strongly linear staining in the lung.

Q. ***Does the Goodpasture's antigen occur in other species? If so, does the human antibody cause disease in other experimental animals?***
A. Yes, the Goodpasture antigen is found in a variety of other diseases. The discovery here was based on cow kidney (I think we got it at Stillwater, Oklahoma). The antibody can be induced by reinfusing the purified antigen back into an animal, be it a mouse or a rat. Somehow the α3 will turn on the disease when reintroduced.

Q. ***I don't know if that last description applies to the Alport's nephropathy that get transplanted and a number of them get the Goodpasture's type syndrome post-transplant or not, but the question I wanted to ask is could somebody comment on the recent description of the involvement of the T-cell in this process?***

A. I will comment on one of your points here. The Alport patient gets the transplant and the allograft is rejected. The antibody is targeted to the α3 in the graft, but also, interestingly, in the sera you can't pick it up very well by an ELISA. It is that biopsy that showed it. Then we eluded the antibodies from the kidneys and it reads the α3.

There is a lot of evidence that the glomerular crescent cells are often composed of T-cells. For example, if you inhibit T-cell function you can inhibit crescent formation, the interstitial inflammation, and some of the interstitial fibrosis.

Q. Is there any evidence or any knowledge as to whether or not this antibody cross reacts with an external agent, either infectious or otherwise?

A. The question is, is there any evidence for molecular mimicry? There is apparently an octapeptide in the Goodpasture's antigen as I understand (the amino acid sequence is SEGTGQA); it is the same octapeptide that is found in the influenza virus. So it is not irrational to think that maybe what Goodpasture saw in 1919 really was a partial effect of the influenza that killed so many people at that time. I think the molecular mimicry as a mechanism for the etiology is clearly a viable hypothesis. We do not have much more evidence for it right now. ▯

Acknowledgment

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The First *In Situ* Split of a Liver in the USA Performed by Two Geographically Distant Transplant Centers—Enhancing, Sharing, and Expanding the Cadaveric Liver Organ Pool

Eliezer Katz, MD; Charles M. Miller, MD; Bakr Nour, MD; Myron E. Schwartz, MD; Anthony Sebastian, MD; Sukru Emre, MD

In situ split of the liver was performed in a heart-beating cadaveric organ donor for the first time in the U.S.A. by two geographically distant transplant centers. The procedure, initiated by a transplant team in Oklahoma City, was a joint project of the transplant teams from Oklahoma City and New York City. The *in situ* split resulted in two liver grafts. A left graft (left lateral segment) which was transplanted into a 7-year-old pediatric recipient in Oklahoma City and a right graft (right lobe and segment IV) which was transplanted into a 52-year-old adult recipient in New York City. Initial graft function was excellent in the two patients. The adult recipient was discharged home 10 days after the transplant and is doing well. The pediatric recipient died two and a half months later from multi-system organ failure. The recently introduced *in situ* split technique provides two excellent liver grafts from one donor and enhances sharing of liver grafts between transplant centers.

Recognizing the present severe shortage of donor livers, especially for pediatric patients, we embarked on a plan to apply the new *in situ* technique for splitting donor livers. This method, which was described recently by the group from Hamburg, Germany,[1] provides two grafts from one donor liver. Left lateral segment for a pediatric recipient and right lobe for an adult recipient. The surgical technique is based on the experience gained in performing living related liver transplantation.[2]

Methods

A collaboration was established between the liver transplantation programs at the Oklahoma Transplantation Institute, and the Mount Sinai Medical Center, and information about potential recipients was exchanged. Arrangements for the harvesting procedure involving two liver transplant centers were made with Oklahoma Organ Sharing Network. When an 18-year-old donor was identified in Tulsa, Oklahoma, on January 19, 1996, two suitable recipients were chosen: a 7-year-old girl in Oklahoma with oxalosis who had been on the waiting list for 8 months, and a 52-year-old man in New York with cryptogenic cirrhosis. Surgeons from each center met in Tulsa where *in situ* splitting was performed jointly within two hours. In the heart-beating cadaveric donor, the harvesting procedure is started by performing a left lateral segmentectomy (segments II and III) using a technique identical to that described for living related liver transplantation.[2] The left graft is thus composed of the left lateral segment. The remaining liver, a right graft, is then removed using the standard cadaveric liver harvesting procedure.

Results

The left graft was transplanted into the pediatric recipient, the 7-year-old girl, using the technique for living related liver transplantation. She also

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reeeived a kidney from the same donor. The right liver graft was transplanted into the adult reeipient using standard technique without removing the medial segment of the left lobe (segment IV). The eold ischemic times for the left graft and the right graft were 8:10 and 11:30 hours, respectively. There were no technical complieations related to the *in situ* splitting of the liver, and initial liver graft function in both patients was good. The adult recipient was discharged 10 days post-transplant with excellent graft funetion and has been doing well sinee. The girl who received the left graft was retransplanted on the sixth postoperative day for hepatie arterial thrombosis. She died 2.5 months post-transplant due to multiorgan system failure.

Discussion

In the present reality of severe shortage of organs, any surgieal method that can inerease the number of organs available for transplantation should be explored. Splitting the liver graft into two grafts was done in the past with unsatisfaetory results.[3] In these eases the liver was split on the "baek table" after the whole liver graft was harvested and put in the eold preservation solution *(ex vivo* splitting). The major disadvantages of the *ex vivo* splitting technique ineluded less than optimal right graft with a high rate of biliary complieations and significant inerease of eold isehemie time. The *in situ* splitting teehnique, on the other hand, provides high quality left and right grafts, eliminates the extra eold ischemic time, ensures exeellent hemostasis of the eut surfaces of the two grafts, and gives the opportunity to geographieally distant transplant centers to address the liver organ shortage by splitting and sharing available organs. We believe that the *in situ* splitting of a liver graft should become routine praetiee in appropriate donors to provide two exeellent liver grafts for pediatric and adult recipients.

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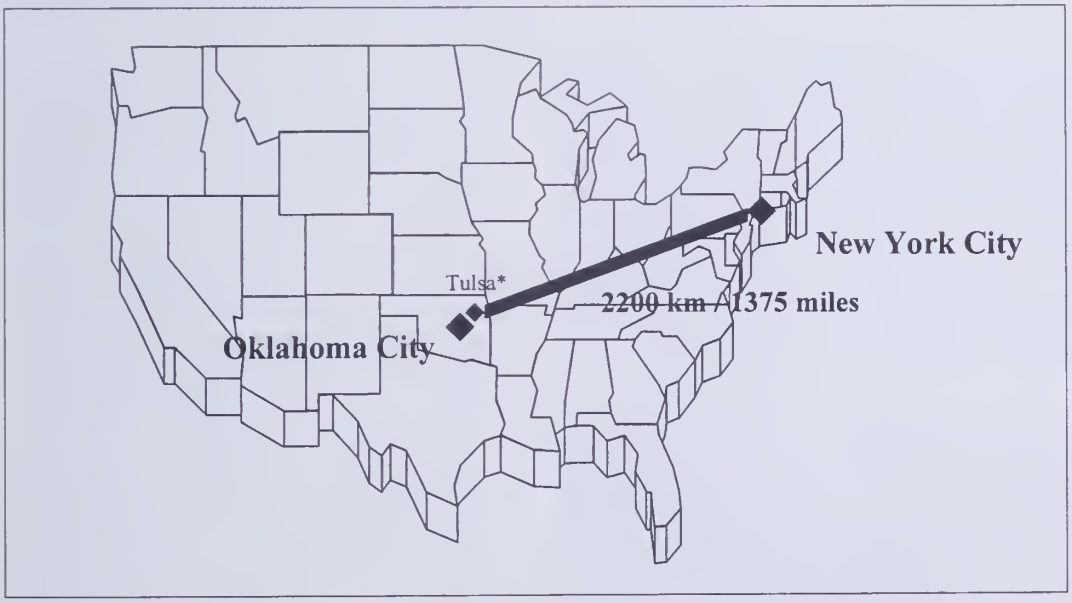


Figure 1. ***In situ*** **split of the liver enables sharing between two transplant centers which are a considerable distance apart (1375 miles).**

Vaginal Birth After Cesarean Section: A Comparison of Rural and Metropolitan Rates in Oklahoma

Christian C. Sieck, MD

The rate of cesarean delivery has risen steadily over the past fifteen years from a rate of 17% in 1980 to 24% in 1995. In an effort to curb medical expenses and reduce the risk associated with operative delivery, many suggestions have been proposed to reduce the rate of cesarean sections. The most promising of these is to reduce the number of repeat cesarean deliveries through vaginal birth after cesarean section (VBAC). For fifteen years the American College of Obstetrics and Gynecology has proposed VBAC as a safe alternative to repeat C-section. VBAC carries a 1% to 2% risk of uterine rupture and is contraindicated in the presence of previous classical uterine incision, multiple gestation, and certain abnormal presentations. In the absence of contraindications, VBAC is as safe or safer than repeat C-section.

This study shows that VBAC rates are lower in two rural hospitals than in two urban hospitals in Oklahoma. Data was collected from two rural and two urban hospitals for the years 1993 through 1996. This data indicates that in urban hospitals the rate of vaginal deliveries (81%) is higher and the rate of C-sections (19%) is lower than in rural hospitals (68% and 31% respectively). Also, the rate of attempted VBAC (46%) and successful VBAC (36%) is higher in urban hospitals than in rural hospitals (30% and 18% respectively).

The lower rate of VBAC in rural hospitals can be explained by several factors, including lack of in-house physicians, anesthesia, and surgical crews; inadequate neonatal intensive care units; difficulty of transfer; economic factors; physician training or experience; and physicians' attitudes. This study points to a need for a larger scale study of VBAC practices among rural and urban physicians in Oklahoma.

The rate of cesarean delivery in the United States has risen steadily over the past fifteen years from 17% in 1980,[1] to 24% in 1995.[2] Cesarean delivery remains the most common operation performed in the United States, performed approximately one million times annually. The reasons for this rise are multifactorial and include reduced parity, older women having their first child, electronic fetal monitoring, breech presentation, decreased incidence of midpelvic vaginal deliveries, concerns over malpractice litigation, socio economic and demographic factors, and the increase in primary cesarean deliveries. A look at cesarean delivery rates for 1990 show that while the United States and Canada continue to have rates in excess of 20%,[2] the rates observed in selected European countries continued to run from 10% to 14%.[3]

With recent concern regarding the economic impact of health care and the increased maternal morbidity and mortality associated with operative delivery,[4-6] several strategies have been pro-

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posed to curb the rising rate of cesarean delivery in the United States. Some have proposed reducing the rate of primary cesarean sections; others feel that repeat cesarean delivery, which accounts for half of all cesarean deliveries,[2] has significantly contributed to the rising cesarean rate in the United States, and efforts to reduce the overall operative delivery rate should focus on reducing the number of repeat cesarean sections.[3]

Vaginal birth after cesarean delivery (VBAC) has long been proposed as a safe alternative to repeat cesarean section. The safety of such vaginal births has been documented for most women.[6] Despite the literature demonstrating the safety of VBAC, there continues to be some reluctance among physicians to attempt a trial of labor after previous cesarean section. Physicians in non-urban areas may be reluctant to attempt VBAC due to fears of inadequate support in the event of a poor outcome and fewer neonatal intensive care resources should an impaired infant result. It is hypothesized that physicians in rural Oklahoma will be less likely to recommend VBAC and less likely to have patients successfully complete VBAC than their urban colleagues.

Materials and Methods

Data were obtained from the labor and delivery departments of two rural and two urban hospitals in Oklahoma for the purposes of comparison. The data obtained were for the years 1993 to 1996. The data set included total number of deliveries, total vaginal deliveries, total primary and secondary cesarean sections, and total number of successful and unsuccessful VBACs. Year-by-year comparisons as well as comparisons of pooled data were made. The rates of vaginal deliveries as well as primary and secondary cesarean sections were calculated as a percent of total deliveries.

The number of those eligible for VBAC was derived by subtracting the number of failed VBAC from the number of those undergoing repeat cesarean section (since the number of failed VBAC is already included in the number of repeat C-sections), and adding to this number those who attempted VBAC. This number was then multiplied by 0.85. (This multiplication factor was derived from published data that 80% to 90% of those with previous cesarean sections are eligible for VBAC, i.e., are not ineligible because of certain exclusionary criteria which will be discussed later.[8,9])

The VBAC success rate was derived by dividing the number of those who successfully delivered vaginally after previous C-section by those attempting VBAC. The VBAC attempt rate compares those who attempted VBAC out of those eligible. The VBAC rate is those who had successful VBAC out of those eligible.

Results

The data obtained from the two sampled rural Oklahoma hospitals for the years 1993-1996 is shown in Table 1. Sixty-eight percent (68%) of all deliveries were vaginal while 31% of all deliveries were operative. Primary cesarean section comprised 18% of all deliveries while repeat cesarean section comprised 13% of all deliveries. Of those eligible for VBAC, 30% attempted and 18% were successful.

Table 2 shows the data obtained from the two sampled metropolitan Oklahoma hospitals for the same years. The rate of vaginal delivery was clearly higher at 81%, while the rates of both primary and secondary cesarean sections were lower at 12% and 6.5%, respectively. Of those eligible to VBAC, 46.6% attempted and 36% were successful.

The percent of total deliveries which were delivered vaginally is displayed graphically in an annual comparison between the rural and metropolitan hospitals for the years 1993 through 1996 in Figure 1. Figure 2 similarly shows the percent of total deliveries which were delivered by primary C-section in rural and metropolitan Oklahoma hospitals for the years 1993 through 1996, and Figure 3 depicts a comparison of the rate of repeat cesarean deliveries between the rural and metropolitan hospitals for those same years.

Table 1. Rural VBAC Data 1993-1996

	Number	Percent
Total Deliveries	3170	-
Vaginal	2163	68.2%
Primary C-Section	569	17.9%
Repeat C-Section	423	13.3%
VBAC eligible	425	-
Attempted VBAC	128	30.1%
Successful VBAC	77	60.2%
VBAC rate		18.1%

Table 2. Urban VBAC Data 1993-1996

	Number	Percent
Total Deliveries	13954	-
Vaginal	11306	81.0%
Primary C-Section	1718	12.3%
Repeat C-Section	901	6.5%
VBAC eligible	1105	-
Attempted VBAC	515	46.6%
Successful VBAC	398	77.3%
VBAC rate		36.0%

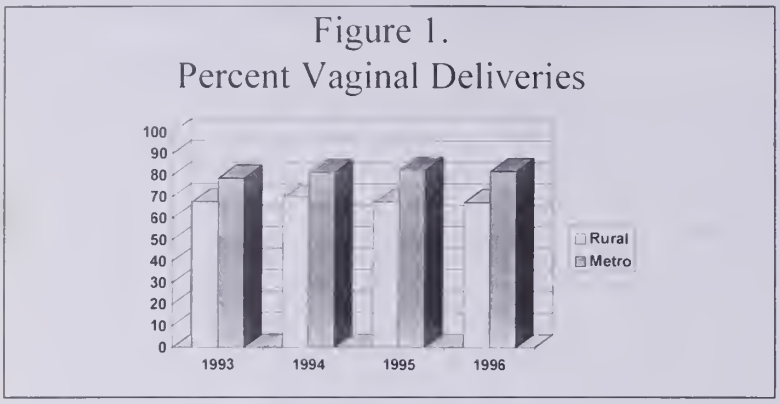


Figure 1. Percent vaginal deliveries

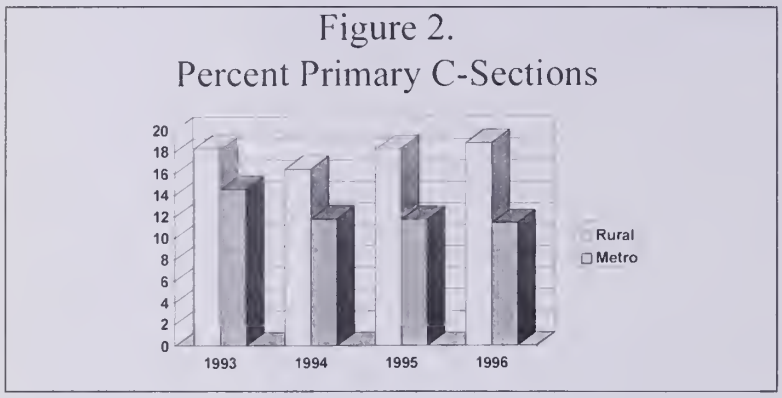


Figure 2. Percent primary C-sections

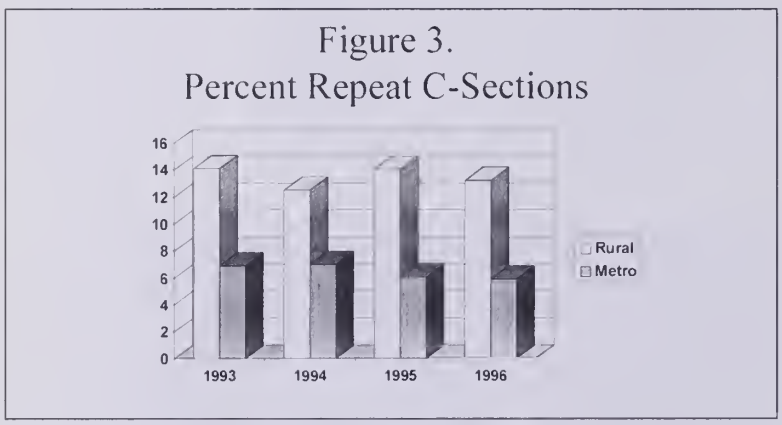


Figure 3. Percent repeat C-sections

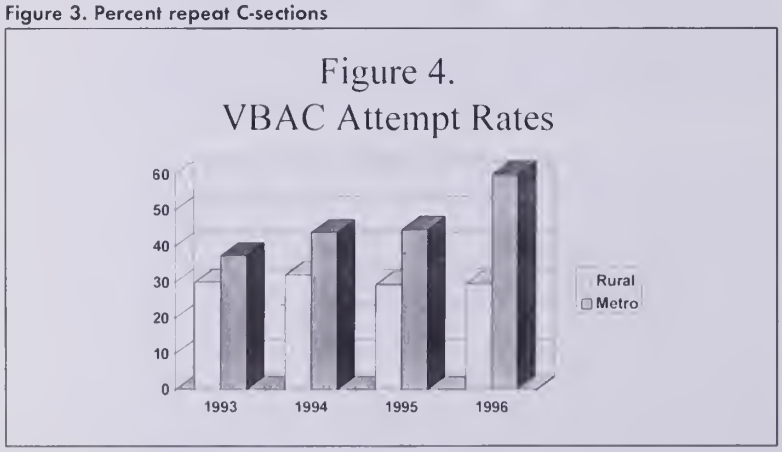


Figure 4. VBAC attempt rates

Figure 4 graphically displays the percent of those attempting VBAC of those eligible to VBAC for rural versus metropolitan hospitals over the years 1993 through 1996. The steady increase in the rate of attempted VBAC at one of the two sampled metropolitan hospitals is shown graphically in Figure 5.

The success rate of attempted vaginal birth after previous cesarean section was consistently higher in metropolitan centers compared to rural centers as displayed graphically in Figure 6. The VBAC rate, those who successfully delivered vaginally after previous C-section divided by those who were eligible to VBAC is displayed in Figure 7. Clearly, the VBAC rate for the rural hospitals sampled was at a consistent level for the four-year study period while the VBAC rate for the two metropolitan hospitals sampled rose dramatically over that same period.

Discussion

Vaginal birth after cesarean section is defined as the vaginal delivery of an infant after one or more previous cesarean sections. Historically, vaginal delivery after previous cesarean delivery has been felt to be contraindicated due to fear that the uterine incision was highly susceptible to rupture.[2] Much of this fear was based on the observation that 8% to 12% of women with classical uterine incisions will rupture if a trial of labor is attempted, and one-third of those with classical incision who rupture will do so prior to labor.[6] Over the past 15 years, however, sufficient evidence has been gathered which would suggest that a trial of labor after previous low-transverse uterine incision is relatively safe in most women.[2,4,5]

In 1980, the National Institute of Child Health and Human Development Conference on Childbirth concluded that vaginal delivery after cesarean birth is an appropriate option.[3] Vaginal birth after cesarean delivery is felt to be the most productive approach to lowering the cesarean rate.[6] Currently, it is recommended that, in the absence of contraindications, a woman with one previous cesarean delivery with a low transverse incision should be counseled and encouraged to attempt labor in her current pregnancy. A woman with two or more previous cesarean deliveries with low transverse incisions should not be discouraged from attempting vaginal delivery in the absence of contraindications should she wish to do so.[3]

The indications for vaginal birth after cesarean delivery are straightforward. A woman must be pregnant and have a history of one or more low transverse cesarean sections. The absolute and relative contraindications for VBAC are less clear. A previous classical uterine incision is consid-

ered an absolute contraindication. Multiple gestation has been proposed as a contraindication due to the added stress on the uterine wall, and while there are documented cases of successful VBAC of twins, most physicians, especially those practicing away from a large medical center, would be hesitant to attempt VBAC under theses circumstances.[6]

Data suggest there is no contraindication to VBAC in frank breech presentation, but with other abnormal presentations, repeat C-section is generally preferred. External version is as safe and successful in women with previous C-section as in those with no previous operative delivery.[6] However, because of current concern about malpractice litigation for less than optimal neonatal outcome for infants delivered breech, clinicians are reluctant to add the perceived risk of VBAC. Fetal macrosomia has been proposed as a relative contraindication, and while VBAC is less likely to be successful in cases where fetal weight exceeds 4000 grams, there is no increased morbidity or mortality associated with VBAC in these cases.[2]

There is concern that the use of epidural anesthesia masks the pain of uterine rupture and thus puts the mother and the fetus at higher risk with VBAC. However, less than ten percent of women with scar separation experience pain and bleeding, and fetal heart rate decelerations are the most likely sign of such an event. Success rates for VBAC with epidural anesthesia are similar to those without epidurals, and there is no increased morbidity or mortality associated with epidural anesthesia in VBAC.[6]

Judicious use of oxytocin or prostaglandins for the induction and augmentation of labor has demonstrated no increased risk of uterine rupture in VBAC.[6] Use of inappropriately high levels of oxytocin has been shown to increase risk of rupture. Recurrent indications for cesarean section (i.e., dystocia, failure to progress, cephalopelvic disproportion) are associated with a lower success rate with subsequent VBAC (61%), while non-recurrent conditions (i.e., breech presentation, fetal distress) are associated with higher success rates (78%).[2,6] Nevertheless, there is no increased risk to mother or child with VBAC in the face of recurrent indications, and a trial of labor should not be withheld for this reason alone.

A recent study in *Lancet*[10] suggested that by ultrasonographically measuring the thickness of the lower uterine segment, one could predict the likelihood of uterine rupture in VBAC. They concluded that a lower uterine segment thickness of greater than 3.5 mm was associated with significantly fewer cases of defective uterine scars. Their study seemed to over-represent the overall frequency of defective scars among all study participants (4%) compared to that seen in other published data (1% to 2%). Inquiries to several hospitals indicated that most radiology departments lack the sonographic precision to be able to estimate lower uterine segment thickness to within a few millimeters.

The management of a trial of labor after previous cesarean section is similar to that for any other vaginal delivery. In addition, electronic fetal

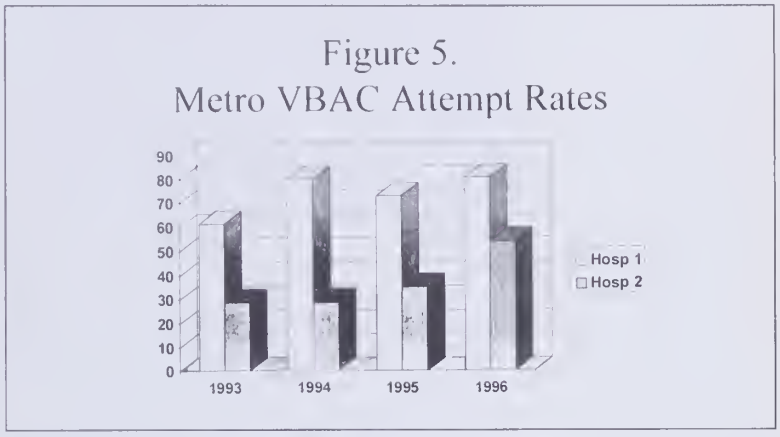


Figure 5. Metro VBAC attempt rates

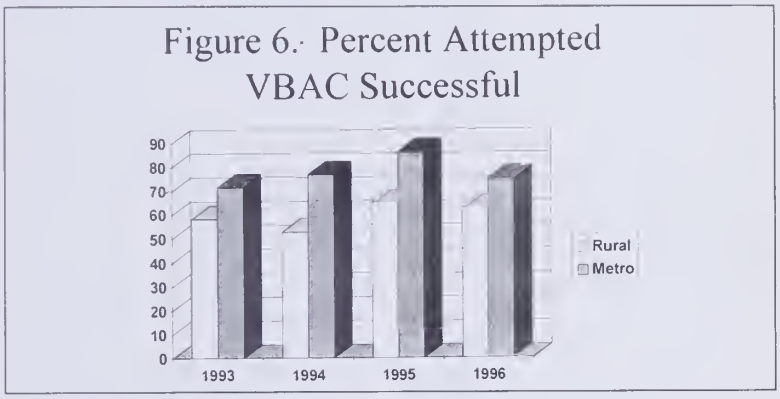


Figure 6. Percent attempted VBAC successful

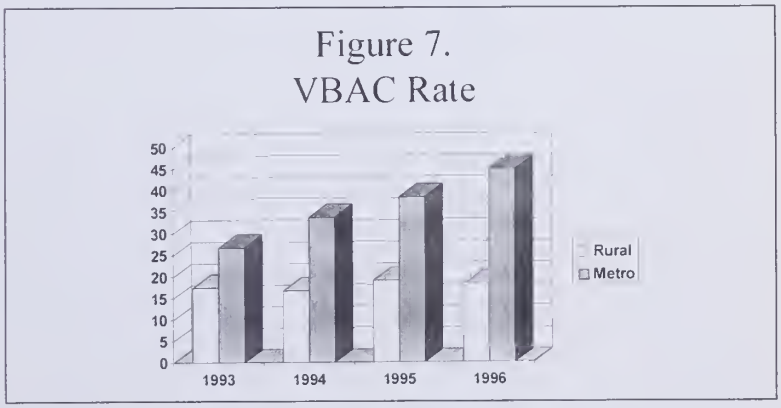


Figure 7. VBAC rate

heart rate and intrauterine pressure monitoring capabilities should be available, and adequate facilities and personnel should be available to perform an emergency cesarean section should it become necessary.[6] If epidural anesthesia or oxytocin augmentation are to be utilized, added fetal surveillance is recommended.

The economic impact of cesarean births is significant. Cesarean delivery can increase the average cost of a birth by as much as 66%.[11] Thus, it is in the economic best interest of the patient or third-party payer to opt for vaginal delivery if it is felt to be a safe alternative.

Physician reluctance to attempt vaginal birth after cesarean delivery continues to be a major impediment to lowering C-section rates. Physicians less than 40 years old and those in practice less that 10 years tend to recommend VBAC more frequently than those older than 40 years and in practice more than 10 years. In addition, physician concerns about litigation have discouraged some from recommending VBAC. However, almost half of all obstetrical malpractice claims in 1988 and 1989 involved cesarean sections, while less than 1% were associated with a woman who delivered vaginally after previous C-section.[11]

Vaginal birth after cesarean delivery is associated with shorter hospital stays, fewer postpartum transfusions, and a decreased incidence of postpartum maternal fever. There is no increased maternal or perinatal morbidity or mortality associated with VBAC. The risk of uterine rupture with VBAC is estimated to range from 1% to 2%.[7,9,10,12,13] Of those, many uterine scar separations were discovered after successful delivery of a healthy infant.

Eighty to ninety percent of those women who have had a previous cesarean section have no contraindications to a trial of labor.[8,9] Nationally, of those women eligible for a trial of labor, approximately half choose to undergo a trial of labor.[2] Of those who chose to undergo a trial of labor 50% to 80% were successful.[1,2] National VBAC rates have risen from 7% (1985) to 18.5% (1989) to 26.5% (1994).

What then can explain the disparity between urban and rural physicians' VBAC rates as demonstrated in the data? In metropolitan hospitals, over 46% of those eligible attempted VBAC and over 77% who attempted were successful. These numbers are consistent with the national data outlined above. Conversely, in rural hospitals, only 30% of those eligible attempted VBAC, and 60% of those who attempted VBAC were successful. Both of these figures are well below the national averages.

Many major metropolitan hospitals have 24-hour, in-house physicians in the labor and delivery ward, and indeed both urban hospitals sampled here have this luxury. Because of the in-house physicians, these units may be more likely to successfully manage a slowly progressing labor and are more quickly mobilized in the event that an immediate operative delivery should become necessary. In this setting, there is a sense of safety for all groups involved, including patients, nurses, and physicians. Likewise, many metropolitan hospitals have full time in-house anesthesia and surgical crews which can be mobilized quickly. Most rural hospitals do not have this level of services, and often the delivering physician is not in the hospital and may be ten or more minutes away should an immediate operative delivery be necessary. This may prompt the rural physician to opt for a surgical delivery in a slow or troublesome labor rather than try to mobilize a surgical crew urgently in the middle of the night.

Additionally, many major metropolitan hospitals are equipped with fully staffed neonatal intensive care units or are located very near to a medical center which has this type of service, in the event that a distressed infant is delivered. Conversely, few rural hospitals are equipped with fully staffed or fully equipped neonatal intensive care units (NICUs), and if a distressed infant is delivered, transfer of that infant often involves a 30-minute or longer flight to a large NICU once the infant is stabilized.

There is a much larger presence of HMOs or other managed care organizations in metropolitan areas than in rural areas. With this comes a greater pressure to control costs and attempt vaginal deliveries.[11] In rural areas, the push to control costs, while still a major concern, tends to be more physician driven, as opposed to third-party-payer driven, and this may account for lower VBAC rates.

Finally, there is a continued fear of litigation on the part of physicians. Many feel that the small risk of a catastrophic outcome while attempting vaginal birth after cesarean delivery is less desirable than the larger but known risk of operative delivery.

Conclusion

In conclusion, VBAC is a well-proven and safe alternative to repeat C-section and an effective means to lowering the C-section rate in the United States. Vaginal birth after cesarean section has a lower perinatal and maternal morbidity and mortality than repeat C-section, and is less expensive than repeat C-section. Finally, in Oklahoma, rural physicians seem to be less likely to attempt and successfully complete VBAC than

their urban colleagues. This study is limited in its scope to only two hospitals located in a single rural community as well as only two hospitals located in the same metropolitan area. Due to this small sample, the possibility exists for a selection bias, and the results of this study may not reflect trends in Oklahoma as a whole. A larger study, involving many rural hospitals in several different communities representing every area of the state as well as many urban hospitals involving more than one metropolitan area would be of great interest to determine if the trends presented here are truly indicative of the larger picture throughout the state of Oklahoma.

Acknowledgment

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COMMENTARY

An Essay on Managed Care and the Patient-Physician Relationship

William A. Grana, MD

In 1927, Dr. Frances Peabody told Harvard medical students, "The essence of the practice is that it is an intensely personal matter. The treatment of a disease may be entirely impersonal; the care of a patient must be completely personal... both diagnosis and treatment are directly dependent on it." In the new health care delivery system, managed care organizations (MCOs) consciously and subtly affect and disrupt the patient-physician relationship. This interference with the primary unit of medical care in the United States is necessary to create profit for the MCO's success. The disruption of this vital interaction occurs as a result of a series of substitutions in the name of savings.

MCOs and other for-profits substitute technicians for thinkers in order to achieve cost savings.

The substitution of technicians for licensed personnel causes a delay in the delivery of appropriate medical care; prevents more expensive, experienced, skilled personnel from consulting with a patient; and decreases costs with cheaper labor. MCOs and other for-profits substitute technicians for thinkers in order to achieve cost savings. This strategy results in the elimination of licensed positions and the substitution of employees who are taught specific jobs, generally while employed, but not the circumstances in which these tasks are necessary or appropriate. The goal is to find the cheapest labor by substitution of technicians for thinkers. In addition, these technicians are given market-oriented titles, such as *care partner* or *nurse helper*. This tends to reassure the patient and provides the employee a title. In addition to these substitutions, whenever possible, the for-profit company has taken the logical action for business, which is downsizing to reduce costs. Such a substitution is reflected in the proposed changes in the federal government's resource-based practice fees where physician specialists have had their fees cut by ten to forty percent, while chiropractors, podiatrists, and optometrists have had their fees increased thirty to sixty percent. The latter are health care providers who have the skill to perform technique-related services, but frequently lack the ability to deal with their own complications, or to recognize more complicated problems.

This emphasis on reduction of cost substitutes profit for the idealism that is inherent in most medical providers during their education. For-profit companies must adhere to the Wall Street standard, which is a fifteen percent increase on an annual basis. That means, for example, that hospital admissions must go up by eight to ten percent, while staff salaries are reduced from one to five percent. Furthermore, management's bonus incentives are tied to meeting these standards. The bottom line is that thorough, compassionate patient-sensitive care cannot be delivered because the money for this is taken out first for the stockholder;

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second, for management; and only finally, to pay for providers and technology. Furthermore, the technician is much more likely to fulfill the financial constraints of the for-profit company, while the thinker is left out of this scenario.

In the last five to eight years, business and industry have forced the substitution of cost constraints for quality control on health care. Rather than improve the quality of care, thereby reducing patient morbidity and mortality to produce the desired result, MCOs have placed cost constraints on spending to provide that level of efficiency and fiscal responsibility. MCOs define success in terms of profit or other measurable outcomes such as life vs. death, admission vs. non-admission. While these statistics are important, the question is how narrowly they represent quality. Such information does not reflect whether a patient was bathed, whether they received physical therapy appropriately, or whether a bedpan was available. The business side of the health care system will respond to the restraints placed on it, but whether this is best for the patient remains to be seen. Hospitals will tend to adhere to these quantifiable outcomes at the expense of the quality-of-life issues. In some emotional areas such as obstetrical deliveries, the outcry from patients has resulted in rapid change, including significant response from governmental agencies. However there is only so much emotion available in our society for these issues. The availability of health care resources may well suffer the effects of these constraints and restraints.

MCOs have substituted deal-doing middle men for service providers. Insurance companies, MCOs, and hospitals (especially for profits) have become more important than the physician or nurse who provides care. These companies have captured market share, and they control what the patient gets in health care resources. For-profit hospitals have substituted marketing, public relations, and ad campaigns for experienced knowledge of the patient's needs. As in other businesses, the for-profit company determines what is best for the consumer. If management says do without then the patient does without. Medicine has become a haven for the deal cutting, mergers, and acquisitions mentality of the seventies and eighties in the United States. Moreover, hospitals and MCOs have brought providers into the process by syndicating health care activity with physicians and other providers (although always keeping the majority interest). The result is that the providers' incentive is to refer to facilities in which they have a financial investment. Some for-profits have institutionalized this relationship by doing deals with medical schools to lock in large numbers of physicians to serve the contracts they generate. As medicine embraces the for-profit ethic more fully, particularly in those companies that are publicly held, the responsibility is first to the shareholders (to get that fifteen percent) and only secondarily to the consumer served. Further, the risk is that as for-profits grow larger and monopolize health care in one region, patients will have fewer alternatives and will be forced to accept whatever access the for-profit provides. As fewer companies control larger segments of the market, the patient will have fewer and fewer choices. When Wal-Mart is the only store in town, you take what Wal-Mart gives you.

We now have a service industry where the incentive is to avoid delivery of service, and especially to those who most need the service.

Moreover, as long as there is an oversupply of physicians and nurses, there will always be doctors and nurses available and willing to cut their fees or salaries to the minimum in order to be competitive in the marketplace. Organized medicine, including the institutions educating physicians and nurses, have failed to deal with this oversupply. As long as that abundance exists, individual physicians and nurses will be at a disadvantage. The relationship between for-profits and medical schools is a concern in this area as well, because the for-profits can influence the labor pool and keep the overabundance, thereby assuring themselves a cheap labor fare.

MCOs rely on the same principle that every prepaid service or business does. Many people need no services, but the monies that are paid go to the bottom line anyway. The substitution of sophisticated actuarial information to predict how much money is needed for health care services has replaced the individual physician-patient encounter. With practice guidelines or protocols to define patient care, there is less need for the development of a personal relationship with a patient. For-profit MCOs have the providers buy in to the concept with capitated care in which the fees are paid up front and therefore the incentive is to provide as little specialized care as possible. A hospital CEO in such a system works hard *to prevent* a patient's admission. We now have a service industry where the incentive is to avoid deliv-

ery of service, and especially to those who most need the service. People who suffer in managed care are those with chronic illnesses, the handicapped, and the disabled because the managed care companies know this segment of the patient population will use disproportionate amounts of medical resources. Anyone who consumes medical resources is a less desirable addition to the patient population. Right now Medicaid HMOs are working financially because the majority of patients are not signed up or do not make use of the prescribed care setting. The AMA reports that in Los Angeles, the indigent patient has little understanding of how the system works or how to access it. Care is provided gratis by the not-for-profits and other traditional providers. When the real cost of services are paid by Medicaid, HMOs will see the real costs of health care. Many of these HMOs will either drastically ration health care resources or go out of business. This has happened already in Tennessee's Tencare Program.

In an integrated system, it is virtually impossible to individualize care, because the goal is to standardize treatment through practice guidelines and other "best recommended" treatments.

In the past, Americans have demanded and received individualized care. However, medicine is now going the way of the rest of commercial business in our country. With mergers and acquisitions, we are seeing in medicine what has happened in our banking system. Eventually, there will be only four or five large banks in our country. While that may be good for the industry and the bottom line for the four surviving banks, it is not good for a customer who wants individualized treatment. Is that really what we want for our health care system? In an integrated system, it is virtually impossible to individualize care, because the goal is to standardize treatment through practice guidelines and other "best recommended" treatments. The problem is patients are not like your bank account. Sometimes there is not an obvious explanation when the numbers don't add up.

As long as there are more healthy people in our society than sick people, there will be an inadequate lobby to protect the individual in the patient-provider relationship. The for-profits have enormous monies to lobby government to protect their business interests. If you are not sick, you cannot appreciate the value of the skills of your health care provider and the difficulty involved in the cognitive and psychomotor aspects of what physicians do. Until the public loses some measure of the quality of care available to it, and enough people are affected, there will be no impetus to bring some sanity back to medicine in the United States. Many physicians are willing to accept their devaluation by the for-profits and the public because they truly enjoy what they do. Many more will opt out because they do not feel they are appreciated for the quality of the services they attempt to provide in a system where cost control is more important than quality of care.

The Author

Dr. William Grana has a masters in public health (health administration and policy) and is a consultant in the area of managed care and physician organizations. He is also a clinical professor of orthopedic surgery and rehabilitation at the University of Oklahoma College of Medicine.

Brian O. Foy to become OSMA's executive director in January

OSMA President David M. Selby, MD, has announced the selection of Brian O. Foy as the association's new executive director. Foy will assume his post in Oklahoma City in January 1998.


Brian O. Foy

Currently, Foy is executive director of the Westchester County Medical Society (WCMS) in Purchase, N.Y., a position he has held since March of 1995. As CEO of the 1,700-member organization, he has been responsible for all strategic and financial operations of WCMS, coordinating the activities of twenty different policy committees. He also directs corporate relations, external communications and media relations, and a health insurance program for members. He spearheaded the reorganization of the society's bylaws and restructured operations and staff to reduce administrative costs and improve efficiency.

"I'm absolutely thrilled to be joining the OSMA team," Foy said. "I look forward to the opportunity to lead the OSMA into the 21st century and to tackle the many challenges which lie ahead. I especially look forward to working closely with OSMA leadership and staff as I become more familiar with the needs and concerns of the Oklahoma physician."

"Please join me in welcoming Brian and his family to our state, the medical community, and the association," said Dr. Selby.

A native Californian raised in Illinois and Indiana, Foy was director of the Department of Medical Services and Specialty Medicine at the Florida Medical Association for five years before assuming the New York post. Prior to that, from 1989 to 1990, he was associate director at the WCMS.

Foy is a member of the American Association of Medical Society Executives (AAMSE) and has chaired that organization's Foundation Fundraising and Annual Conference Golf committees. He is also a member of the American Society of Association Executives (ASAE) Executive Management Section and of his local Rotary Club.

He holds a BS degree from the U.S. Merchant Marine Academy, Kings Point, N.Y., where he graduated in 1983, and is a Lieutenant Commander in the U.S. Naval Reserve. He and his wife, Karen, have four children: Melissa, 13; Vincent, 10; James, 5; and Connor, 10 months.

Dr. Selby, who chaired the OSMA Search Committee, announced Foy's acceptance of the post on October 29, ten days after final interviews with the Board of Trustees. Foy was among the top candidates located by the executive search firm of Witt/Kieffer, Ford, Hadelman, and Lloyd. Members of the search committee were: Robert J. Weedn, MD; Richard E. Martin, MD; W. Frank Phelps, MD; David L. Harper, MD; Boyd O. Whitlock, MD; Norman K. Imes, MD; Roger E. Sheldon, MD; Rebecca G. Tisdal, MD; and Sara R. DePersio, MD. Consultant-at-will to the committee was Gordon H. Deckert, MD.

During the ten months prior to Foy's appointment, former OSMA Director of Operations Kathleen A. Musson has served as acting executive director. She has been assisted and supported by staff members Debbie M. Adams, membership secretary; Shirley E. Burnett, comptroller; Janet Carr, receptionist; Toni L. Farrar, administrative assistant; Marilyn Fick, secretary; Judy A. Lake, OMPAC director; Barbara Matthews, administrative assistant; Susan F. Records, managing editor; and Sue Graves, receptionist; as well as lobbyists Vicki W. Rankin and Lynne S. White.

Oklahoma's new Do-Not-Resuscitate Act has been in effect since Nov. 1

On November 1, 1997, a new Oklahoma law went into effect governing the use of Do-Not-Resuscitate orders, commonly called DNR orders. This new law sets forth specific circumstances under which a DNR order may be written, terminated, and transferred between health care providers. The purpose of this advisory is to summarize the provisions of this new law, discuss some of the issues this new law creates, and suggest ways in which a health care provider can assure compliance with this new law.

The Oklahoma Do-Not-Resuscitate Act, found at 63 Okla. Stat. SS 3131.1 through 3131.14 (the "DNR Act"), sets

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DNR Act *(continued)*

forth a number of new criteria governing the use of DNR Orders. DNR Orders have been used for a number of years to indicate that a patient should not receive cardiopulmonary resuscitation ("CPR"), in the event of cardiac or respiratory arrest. Unless such an order exists, CPR typically is used for a patient in arrest. However, CPR may not be medically appropriate for a patient in the final stages of a terminal illness or a severely injured patient whose death is imminent. In the past, decisions regarding whether a DNR Order should be entered generally were made by the attending physician and the patient, if competent, or the patient's legal representatives and/or family members, if the patient was not competent.

Requirements for Entering DNR Orders

Under the DNR Act, every person is presumed to consent to the administration of CPR unless one or more of the following conditions are satisfied:

1. A person has notified his/her attending physician that he or she does not consent to CPR in the event of cardiac or respiratory arrest, and such notification has been entered in the person's medical record;

2. A representative (who must be either a legally appointed guardian, health care proxy or attorney-in-fact for health care decisions) of an incapacitated patient notifies the attending physician that the representative, based on the known wishes of the patient, does not consent to CPR for the patient, and such notification has been entered in the patient's medical record;

3. An attending physician of an incapacitated patient without a representative knows by clear and convincing evidence that the patient, when competent, decided on the basis of information sufficient to constitute informed consent that such person would not have consented to CPR in the event of cardiac or respiratory arrest. For purposes of this condition, "clear and convincing evidence" includes oral, written or other acts of communication between the patient, when competent, and family members, health care providers, or others close to the patient with knowledge of the patient's personal desires;

4. A DNR Consent form which satisfies the requirements of the DNR Act has been executed by the patient or the representative of an incapacitated patient; or

5. An executed advanced directive or other document recognized under the Oklahoma Rights of the Terminally Ill or Persistently Unconscious Act "Rights Act") is in effect for such patient, which document directs that life-sustaining

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This Advisory carries the following admonition: "...does not constitute legal advice and should not be used to resolve legal questions. Readers should seek counsel with regard to specific factual situations before acting with regard to the subject matter of this Advisory."

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AMA finds questions still lingering in wake of Sunbeam deal

With the failed Sunbeam endorsement deal continuing to draw comment in October, Thomas R. Reardon, MD, chair of the American Medical Association Board of Trustees, found himself fielding questions from individual physicians as well as the press. The following letter went out in late October to all physicians who wrote the AMA expressing their concerns about the issue:

Dear Doctor:
I'm writing to acknowledge your thoughtful comments and concerns related to the August announcement of an American Medical Association (AMA) and Sunbeam alliance. This arrangement, which would have involved the use of the AMA's logo on Sunbeam home health care products and the provision of specially designed health information for the public, contained elements that were inconsistent with AMA policy and mission.

Our members, our AMA leadership, the media, and the public voiced serious concern about several aspects of this arrangement and AMA's integrity was called into question. Your AMA listened and it responded.

Although our intent was to use any revenue generated from the program to fund AMA public health initiatives, the agreement, in the form executed, was a mistake. The AMA Board of Trustees had neither reviewed nor approved it, and our own internal review processes had not been followed properly. Responsible individuals failed to recognize the full implications of the Sunbeam transaction and its inconsistency with AMA policy and they have left AMA employment. Within two weeks of the agreement's execution, we repudiated it and we asked Sunbeam to release us from the contract. As you are probably aware, Sunbeam responded by filing a civil lawsuit against us in federal court.

To ensure that the mistakes made in the Sunbeam transaction do not happen again, your AMA Board of Trustees has taken the following actions.

- First, no association of the AMA's name or logo with a company, product or service will be permitted until the AMA Board of Trustees establishes a clear set of policies, consistent with the AMA's ethical values.

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DNR Act *(continued)*

treatment not be performed in the event of cardiac or respiratory arrest.

To the extent the conditions of the DNR Act are met, no health care provider, agency or individual employed by or acting as the agent of, or under contract with, any health care provider or agency, will be subject to criminal prosecution, civil liability or discipline for unprofessional conduct for carrying out in good faith a DNR Consent or Order, or taking any other actions in compliance with the Act. Alternatively, actions which do not comply with the DNR Act are not granted such protection. The DNR Act thus implies that the entering of a DNR Order which does not comply with the conditions of the DNR Act could subject health care providers to criminal prosecution, civil liability or discipline for unprofessional conduct. It is estimated that 85% of all patients do not have a representative or an advance directive and have not communicated to their physicians their desires regarding CPR. The DNR Act does not permit a physician, in consultation with family members who are not representatives of an incapacitated patient, to enter a DNR Order for such a patient, even if all of the interested parties agree that such action is in the best interest of the patient. Under the third condition discussed above, the attending physician of an incapacitated patient may unilaterally enter a DNR Order if the physician certifies that he or she knows by clear and convincing evidence that the patient decided, on the basis of information sufficient to constitute informed consent, that he or she would not consent to CPR in the event of cardiac or respiratory arrest. The standards set forth in this condition are very different from those previously used in entering DNR Orders for a number of reasons.

First, a DNR Order may only be entered if it is clear that the patient expressly desired not to receive CPR under the circumstances, after receiving sufficient information to constitute informed consent. The standard for informed consent in Oklahoma requires that a patient receive all information which that particular patient would consider material in making a treatment decision. This is different from the standard applied in most states, which merely requires a patient to be given all information that a "reasonable" person would consider material. The Oklahoma standard requires a higher level of disclosure, and such disclosure must be documented in some appropriate manner.

Second, the "clear and convincing evidence" standard under Oklahoma law requires a firm belief or conviction as to the truth of the assertion. A physician may not enter a DNR Order for a patient unless he or she has evidence of the patient's wishes which meets this standard, and executes a certificate to this effect. Physicians should exercise great caution in reviewing both the (i) information given to the patient and (ii) the evidence of the patient's decision, prior to executing such a certificate.

The DNR Act also raises an issue regarding the language required to be included in an advance directive in order to permit the entering of a DNR Order. The fifth condition states a DNR order may be issued for a patient who has an advance directive meeting the requirements of the Rights Act, if such advance directive directs that life-sustaining treatment not be performed in the event of cardiac or respiratory arrest. The advance directive form included in the Rights Act contains the following broad direction regarding life-sustaining treatment:

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AMA and Sunbeam deal *(continued)*

- Second, no association of the AMA's name or logo with a company, product or service will be permitted without full disclosure to and prior approval by, the AMA Board of Trustees.

The ill-fated Sunbeam deal has taught us this important lesson—that our AMA must play a leadership role in setting guidelines for how organized medicine should relate to the private sector. To accomplish this, we will appoint a blue-ribbon panel of leading ethicists specializing in medicine, business and institutional affairs to create a set of definitive standards to guide the conduct of any and all corporate relationships involving the AMA. We are also reviewing all current business relationships and re-examining our internal processes to make sure that a situation like the Sunbeam affair does not arise again.

Our AMA reaffirms to you, the profession, the public, and our nation's policy leaders that our values are in order. Professionalism, advocacy for the highest ethics and preservation of the patient/physician relationship are what the AMA and the profession must stand for. These are the values that will guide all AMA actions now and in the future.

We trust that the steps we have taken will erase any lingering doubts you may have about our AMA principles or its ethics. Above all else, we remain committed to serving you and your 300,000 fellow members as the leading advocate and public voice for quality patient care.

Sincerely,
Thomas R. Reardon, MD

DNR Act *(continued)*

I direct that life-sustaining treatment shall be withheld or withdrawn if such treatment would only prolong my process of dying, and if my attending physician and another physician determine that I have an incurable and irreversible condition that even with the administration of life-sustaining treatment will cause my death within six (6) months.

(signature)

Life-sustaining treatment is defined in the Rights Act to include any medical procedure or intervention that, when administered to a qualified patient (e.g., a patient at least 18 years old who has been diagnosed to be in a terminal condition or persistently unconscious) would only serve to prolong the process of dying or to maintain the patient in a condition of persistent unconsciousness. Thus, CPR would constitute a life-sustaining treatment for a qualified patient. If a patient has executed an advance directive with this broad language, arguably a physician could enter a DNR Order for such a patient, so long as such patient is a qualified patient. Although some commentators have suggested that an advance directive must include express instructions regarding CPR, the DNR Act does not appear to require this. However, the insertion in an advance directive of specific language regarding CPR may help assure that the patient's wishes are followed.

It is important to keep in mind that an advance directive under the Rights Act can only be implemented for a qualified patient. Thus, if a patient with an advance directive is incapacitated but is not terminally ill or persistently unconscious, the advance directive could not be implemented and a DNR Order could not be written.

Two of the conditions for implementing a DNR Order permit the representative of an incapacitated patient to authorize the entering of such order. The second condition permits a representative to refuse to consent to CPR for the patient if the representative bases this decision on "the known wishes of the incapacitated person." The DNR Act does not contain any standard for making this determination. Thus, the type of evidence of the patient's wishes required is unclear. A representative who is a health care proxy appointed under the Rights Act may only take such action if the patient is terminally ill or persistently unconscious.

The fourth condition of the DNR Act permits either a patient or a representative of an incapacitated patient to sign a DNR Consent form, thus unilaterally authorizing the withholding of CPR for the patient. This is a significant departure from prior law, which only permitted a representative to authorize the withholding of life-sustaining treatment under very limited circumstances. In particular, a guardian was required to have a specific court order or an effective advance directive authorizing the withholding or withdrawal of any life-sustaining treatment. A health care proxy under the Rights Act, and a person with a durable power of attorney for health care under the Uniform Durable Power of Attorney Act, could only authorize withholding and withdrawal of life-sustaining treatment if the patient had been diagnosed with a terminal condition or was persistently unconscious. The DNR Act now permits a representative who is a court-appointed guardian or an attorney-in-fact to unilaterally sign a DNR Consent form authorizing a DNR Order, even if the patient does not meet these criteria. However, such Consent will not be effective if it is contrary to an advance directive previously executed by the patient. A health care proxy can only execute a DNR Consent if the patient is a qualified patient, i.e., terminally ill or persistently unconscious.

Like the Rights Act, a physician or other health care provider who refuses to comply with a DNR Consent or Order must advise the patient or his/her representative as promptly as possible, and take reasonable steps to arrange care for the patient by a physician or other health care provider who will honor the DNR Consent or Order.

DNR Orders for Minors

The DNR Act does not address the entering of DNR Orders for minors. Generally, minors are presumed to lack the capacity to consent to medical treatment on their own behalf and therefore are not able to provide effective consent to the issuance of a DNR Order. Further,

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The Oklahoma Telemedicine Act

By Amy E. Kempfert

Telemedicine, the practice of medicine across distances via telecommunications and interactive video technology, has become possible with the advent of the computer age. On July 1, 1997, the Oklahoma Telemedicine Act became effective. Because telemedicine is a growing phenomenon, physicians should be familiar with the act and its terms.

The act defines telemedicine as the practice of health care delivery, diagnosis, consultation, treatment, transfer of medical data or exchange of medical information by means of interactive audio, video, or data communications. It specifically *excludes* consultation by telephone or facsimile machine.

Under the terms of the act, the health care practitioner who is in physical contact with the patient shall have the ultimate authority over the care of the patient and shall obtain a written informed consent from the patient prior to the delivery of health care via telemedicine. This consent must contain the following information: (1) a statement indicating that the patient retains the option to withhold or withdraw consent at any time without affecting the right to future care or treatment or risking loss or withdrawal of any program benefits to which the individual would otherwise be entitled; (2) a description of the potential risks, consequences, and benefits of telemedicine; (3) a statement of all existing confidentiality protections; (4) a statement that patient access to all medical information transmitted during a telemedicine interaction is guaranteed, and that copies of this information are available at *stated costs,* which shall not exceed the direct cost of providing the copies; (5) a statement that the dissemination to researchers or other entities shall not occur without written consent; and (6) a statement indicating that the patient understands the written information provided to him regarding telemedicine and that it has been discussed with the health care practitioner or the practitioner's designee. This consent shall become a part of the patient's medical records.

The act prohibits health care service plans, disability programs, insurer programs, worker's compensation programs and state Medicaid managed care program contracts from requiring person-to-person contact between a health care practitioner and a patient for services that a health care practitioner determines to be appropriately provided by means of telemedicine. Certain exceptions may apply to the state Medicaid managed care program.

Telemedicine may permit health care services to be offered in ways never previously available, but it may also present some novel legal problems in the areas of licensing, credentialing, and confidentiality. While the legal implications are as yet unknown, what is certain is that telemedicine appears to be here to stay in Oklahoma.

The Author

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DNR Act *(continued)*

a person cannot execute a living will or a health care proxy until he or she is 18 years of age. Thus, even though the DNR Act does not contain any age requirements, a minor arguably would lack the capacity to sign a DNR Consent or otherwise authorize a DNR Order.

There is no Oklahoma case law pertaining to the issuance of DNR Orders for minors. Judicial decisions on the subject from other jurisdictions have weighed the right of the parents to make medical decisions for their children against the state's interest in promoting life and preventing harm to children. The few cases from other jurisdictions which have addressed this issue generally have recognized that parents have the right to make treatment decisions for their children, including decisions to withhold or withdraw life-sustaining treatment. However, in light of the lack of direct Oklahoma authority on this point, it may be prudent for parents of minor children to be named as the legal guardian of the child in order to give them clear authority to execute a DNR Consent or authorize a DNR Order.

Transfer of a DNR Order or Consent

To the extent a valid DNR Order or Consent is in existence for a patient, the DNR Act permits the order or consent to remain in effect if the patient is transferred from one health care facility or provider to another. The existence of the DNR Order must be communicated to the receiving provider prior to transfer and a copy of the DNR Order must accompany the transferred patient.

Revocation of DNR Consent

A DNR Consent may be revoked under the DNR Act in the following manner:

1. A person (or the representative of an incapacitated person) under the care of a health care agency may revoke his or her DNR Consent at any time by making an oral, written, or other act of communication to a physician or other health care provider.

2. A person (or the representative of an incapacitated person) not under the care of a health care agency may revoke a DNR Consent by destroying the consent form and removing all DNR identification and notifying the person's attending physician.

Again, the DNR Act differs from prior law by permitting a representative to unilaterally terminate a DNR Consent of a patient, even if such action is not consistent with the express wishes of a patient.

Use of DNR Consent Form

The DNR Act contains a preferred form for a DNR Consent. Any DNR Consent

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Immunizations for children are covered

Exciting news for the children of our state! This year's state legislature passed an immunization "First Dollar Coverage" law. What is "First Dollar Coverage"? First Dollar Coverage means all immunizations currently or subsequently required by the Oklahoma State Board of Health will be covered by most medical insurance plans issued or renewed on or after January 1, 1998, in Oklahoma. This coverage is not subject to a deductible, copayment, or coinsurance.

The law, Senate Bill No. 277, specifically states that a health benefit plan "that provides benefits for the dependents of an insured individual shall provide coverage for each child of the insured, from birth through the date such child is eighteen years of age for:

1. Immunization against: diphtheria, hepatitis B, measles, mumps, pertussis, polio, rubella, tetanus, varicella, haemophilus influenzae type B, and hepatitis A, and;

2. Any other immunization subsequently required for children by the State Board of Health."

There is one exception to the law. Companies which self-insure are not required to provide this coverage. Congress gave them an exemption under the federal law known as Employee Retirement Income Security Act of 1994 (ERISA). Even with ERISA, Senate Bill 277 means that most children in Oklahoma will now be covered.

Passage of this law represents the removal of one more barrier to reaching the national goal of fully immunizing all children by their second birthday. Currently, 74% of the children born in Oklahoma are up-to-date with the primary series of 4 DTP, 3 polio, and 1 MMR by their second birthday. This is below the national level of 78%. Hepatitis B coverage is at 81% compared to the 80% national level.

Oklahoma's State Immunization Information System (OSIIS) is the best way to check on a child's immunization status. The computerized OSIIS will provide on-line access to immunization information and allow providers to track vaccine inventory and update a child's immunization history. This system will also allow the Oklahoma State Department of Health to mail reminder recall notices for each provider on-line. Recall is performed at no cost to the provider. If you would like information regarding OSIIS, please call the Oklahoma State Department of Health, Maternal and Child Health Service, Immunization Division at (405) 271-4073.

DNR Act *(continued)*

form used must be substantially the same as the statutory form, and must be witnessed by two persons who are at least 18 years old, and who are not eligible to inherit from the patient. It is not required to be notarized.

Unlike advance directives executed under the Rights Act, a DNR Consent may be implemented even if the patient is not terminally ill or persistently unconscious. Patients need to understand this when executing a DNR Consent form. In order to provide greater assurance that CPR will only be withheld under appropriate circumstances, reliance upon language in an advance directive may be preferable to the execution of a DNR Consent. This also would prevent a representative from unilaterally revoking a DNR Consent executed by a patient.

Conclusion

The DNR Act provides significant changes in the issuance and effectiveness of DNR Orders. To protect themselves from potential liability, it is important that all health care providers become familiar with these new requirements. Existing policies and procedures need to be reviewed and possibly revised to assure compliance with the DNR Act.

If you have any questions regarding the information in this Advisory, you may contact James L. Hall, Jr. at (405) 235-7720, Karen S. Rieger at (405) 235-7788 or the other lawyer at Crowe & Dunlevy who typically handles your healthcare law matters. ▯

Update on Hepatitis C Virus (HCV) Infection

Infection with hepatitis C virus (HCV) has become a major public health problem in the United States, infecting an estimated 4 million persons; approximately 30,000 new cases and about 8,000 HCV-related deaths are thought to occur per year.[1,2] The number of deaths per year, however, is predicted to increase as much as threefold in the next two decades as chronically infected persons gradually develop fatal complications of the disease, which include cirrhosis, liver failure and hepatocellular carcinoma.[1] HCV infection is the number one reason for liver transplantation in the U.S., and the number two cause of liver disease, behind alcohol-related liver disease.[1,3] A recent federal statute has encouraged persons who received a transfusion of blood or blood products, or a solid organ transplant, prior to 1992, to undergo testing for HCV. In Oklahoma, testing is being conducted by the Oklahoma Blood Institute based in Oklahoma City. Positive screening tests, and the increasing long-term complications of HCV will likely result in many visits to primary care physicians in the future.

Hepatitis C is most efficiently transmitted via the percutaneous route. Therefore, a history of transfusion of blood or blood products, or organ or tissue transplants before 1992, long-term kidney dialysis, use of contaminated needles by injection drug users (IDU), and accidental needle sticks in health care workers are all risk factors for infection. Other potential risk factors include high-risk sexual behavior (multiple partners, history of STD), having had tattoos from unsterile needles, sharing razors or toothbrushes with infected persons, and working in the health care profession.

Transmission has also been documented from household contacts, monogamous sexual contact, and perinatally, though these risks are considered low.[1,2,4-10] About 50% of acute cases in the U.S. are associated with intravenous drug use; less than 10% of new cases have no obvious explanation.[1]

Physicians may encounter HCV infected patients presenting in a wide variety of ways. Some present with classic symptoms of hepatitis, including jaundice, nausea, weight loss, and abdominal discomfort. Alternatively, patients may present with only mild intermittent fatigue and energy loss. Other patients with HCV may be identified after discovery of an unexplained elevation of the alanine aminotransferase (ALT), or be referred after having been found to have the anti-HCV antibody on a screening test. Unlike in hepatitis A or B, with HCV infection, most (85%) cases of acute infection progress to the development of chronic infection; only 15% of cases are self-limited. Many patients with chronic infection will remain asymptomatic with no elevation of the ALT.

In general, the physician's initial goals are to confirm the diagnosis and to identify those with chronic infection (defined as persistent infection for a period of greater than six months). Since most patients do not experience symptoms with acute infection, it is generally very difficult to know what stage of disease the patient is in upon initial identification of an HCV positive test. A careful history is essential to determine if the patient has risk factors for HCV infection.

The initial test of choice for the diagnosis or screening for HCV is the second generation enzyme immunoassay (EIA-2), which measures antibodies against HCV. The EIA-2 is quite sensitive (92% to 95%) but not highly specific, and false positives may occur, especially in persons at low risk for HCV infection (e.g., blood donors). A positive EIA-2 is more likely to be a true result in patients with HCV risk factors, elevated ALT levels, or clinical liver disease. Low-risk individuals with a positive EIA-2 test should undergo supplementary testing with the second generation recombinant immunoblot assay (RIBA-2), which measures antibodies to the same HCV antigens as the EIA-2 test. If this test is negative and the patient has no evidence of liver disease, the EIA-2 was almost certainly a false positive and the patient can be reassured.

A positive EIA-2 and RIBA-2 indicate that the patient has had an infection with HCV but does not tell us whether the infection is ongoing or resolved (however, only about 15% of cases are self-limited). Although ALT levels are abnormal in the majority of patients with chronic HCV infection, about one-third of these patients have normal levels. The presence of active infection can also be determined with an assay for HCV RNA by polymerase chain reaction, which detects the RNA virus directly. The HCV RNA test is expensive and is limited by potential laboratory technical problems and the fact that sometimes HCV RNA is only detectable intermittently, even in cases with active infection. Little is known about proper management of persons with positive EIA-2 and RIBA-2 assays who are negative on HCV RNA testing. These individuals may require monitoring and repeat RNA testing.

Consultation with a specialist is indicated for patients with confirmed, chronic HCV infection for consideration for liver biopsy and treatment. Although patients with HCV infection and normal ALT levels have been referred to as "healthy" HCV carriers, liver biopsy can sometimes show significant pathology. Consideration should also be given to hepatocellular carcinoma since HCV-infected persons are at increased risk for this disease.

The main treatment modality available for patients with HCV infection, currently, is interferon alpha-2b. Therapy is for 12 months, with 3 million units given subcutaneously three times per week. The sustained response rate six months after completion of therapy is 20% to 30%. Contraindications to therapy with interferon include a history of major depression, cytopenias, hyperthyroidism, renal transplant or autoimmune disease; patients with drug or alcohol addictions need rehabilitation before HCV therapy should be considered.[1] While any patient with chronic HCV is potentially a candidate for therapy with interferon, treatment decisions should be made on an individual basis with input from a consultant. Those with liver failure should be considered for liver transplantation.[1] Patients with HCV should be strongly encouraged to refrain from using alcohol (which increases the risk of hepatocellular carcinoma and accelerates the progression of chronic liver disease), and should avoid raw seafood which could predispose them to vibrio infections. Hepatitis A and B vaccines should be given since co-infection with either of these viruses could greatly exacerbate the course of HCV infection. Support groups may help patients cope with illness. In many cases reassurance is warranted since some cases resolve

(continued on next page)

Remember, measles is a reportable disease!

Clinical case definition for measles is:

- A generalized rash lasting 3 days or longer
- Temperature greater than or equal to 38.3°C (101°F)
- Cough, coryza, or conjunctivitis

If an illness meets this definition, call your local health department as soon as possible. Also, draw an acute blood titer as soon as possible after rash onset and a convalescent blood titer no sooner than 14 days after the acute. Send both bloods to the Oklahoma State Department of Health, Public Health Laboratory, for IgG testing. There is no charge for this testing. For more information call the Maternal and Child Health Service, Immunization Division at (405) 271-4073.

From the OSDH *(continued)*

spontaneously, others respond to therapy, and still others have a largely asymptomatic course.

To prevent spread of HCV, adherence to universal precautions in the health care setting is important. Efforts are needed to prevent the use of contaminated needles among injection drug users. HCV positive patients should not donate blood, organs, tissues, or semen. High risk sexual behavior should be avoided. Spouses of HCV-infected persons should be tested for HCV, and if negative, counseled about the low but present risk of transmission; consideration should be given to using latex condoms to prevent transmission.[4] Infected persons should not share razors and toothbrushes and open wounds should be covered. Eating utensils can be shared. Breast feeding is considered safe, and pregnancy is not contraindicated since the risk of perinatal transmission is thought to be quite low. There is no reason to exclude HCV-positive children or adults from participation in social, educational, and employment activities. All cases of HCV, acute or chronic, are considered reportable in Oklahoma; cases should be reported to the OSDH Acute Disease Division using the standard blue card or by telephone (405-271-4060) or fax (405-271-6680). By reporting cases to the health department, the spread and distribution of the disease in Oklahoma can be tracked, and preventive measures targeted to high risk regions and groups.

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Partnership outcomes related to 1997 OSMA resolution on women's health

During the annual 1997 meeting of the Oklahoma State Medical Association (OSMA), the OSMA House of Delegates endorsed a resolution on women's health.[1] This article provides the membership with a background on the resolution and a summary of the activities related to the resolution.

In July 1996, Oklahoma's First Lady, Cathy Keating, developed an Advisory Council on women's health to develop an agenda for women focusing on midlife years. The Advisory Council partnership includes the First Lady's office, the Oklahoma State Medical Association, the Oklahoma State Department of Health, Business and Professional Women, the American Cancer Society Heartland Division, Oklahoma Junior Service Leagues, and the Oklahoma League of Women Voters. The Oklahoma Women's Health Network includes women in leadership from local communities including members of the OSMA Alliance, Oklahoma Association of Family and Community Education Services, American Association of Retired Persons, and other localized groups. The Advisory Council recommended an assessment of women's health programming and the development of awareness activities related to the issues. These two events prompted the creation of a statewide population-based effort to address these issues.

The needs assessment was conducted by the Oklahoma State Department of Health, Chronic Disease Service staff. The staff conducting the needs assessment were members of ORCHID, Oklahoma's comprehensive database of chronic disease prevention and health promotion resources. Respondents indicated that the needs assessment reflected that ninety-one (91) Oklahoma agencies provided women's health services. Of this group responding, two-thirds (2/3) were health department facilities. Services offered included clinical services, outreach services, awareness programs, and units specializing in women's health. Only about 54% of the agencies offered programming for women in their mid-life years, and these programs centered around breast cancer. This data provided the framework for planning.

"Hats Off to Women's Health" was selected as the theme of the partnership. The mission and objectives of the network and Advisory Council are as follows:

Mission: To promote, educate, and heighten awareness of women's health issues statewide.

- breast, cervical cancer, lung cancer
- cardiovascular disease and diabetes
- menopause
- mental health
- osteoporosis

Objectives:

1. Educating and raising awareness of the total population concerning diseases, symptoms, cures, and prevention;
2. Raising awareness of medical professionals;
3. Promoting healthy living choices; and,
4. Providing resources and service availability.

The Oklahoma Women's Health Network has delineated roles and responsibilities. The key to the leadership and implementation of the network is the work of the Advisory Council (Table 1: Roles and Responsibilities). Members of the Oklahoma State Medical Association have been involved as speakers, community planners, and as resources for technical expertise. This role is vital in imparting accurate, current information for communities, their leadership, and their community consumers.

In January 1997, the First Lady hosted a statewide meeting to launch the Oklahoma Women's Health Network and "Hats Off to Women's Health." Women and men from all seventy-seven counties were invited, and some 100 women and men attended the meeting at the Governor's Mansion. This group was empowered to return to their commu-

nities and begin planning an effort for their region, county, or community. A planning guide called "Hats Off to Health" was developed to assist with local planning efforts. The guide provided chapters on the overall mission, objectives, and planning strategies; Oklahoma health statistics by county; "Hats Off to Women's Health," an audience participation skit guide; and sections on breast and cervical cancer, menopause, depression, cardiovascular disease, osteoporosis, nutrition, smoking cessation, and exercise. A fifteen-minute video, a prevention prescription, and brochures were developed to complement the agenda.

To date, women's health forums as community awareness activities have been held in a dozen communities with some 3500 women in attendance. The twelve communities are Altus, Ardmore, Bartlesville, Chandler, Moore, Okmulgee, Pawhuska, Poteau, Pryor, Sallisaw, Tulsa, and Woodward. Each community has organized and focused their women's health forum to address their needs.

Altus: In Altus, the program included presentations from community physicians and other health care professionals on cardiovascular disease, cancers in women, physical activity, depression, and nutrition. First Lady Cathy Keating provided the keynote address. A second program targeted Hispanic women and all the speakers were Spanish-speaking.

Pryor: In Pryor, the community organized a health fair with cancer, cardiovascular disease, menopause, and depression exhibits, seminars, and health screenings.

Chandler: In Chandler, the Business and Professional Women hosted a community luncheon in which First Lady Cathy Keating was the keynote speaker, and then women from the audience participated in the "Hats Off to Health" skit.

Pawhuska: In Pawhuska, their event targeted intergenerational invitations with daughters, mothers, and grandmothers.

Okmulgee: In Okmulgee, the community held a two day event with First Lady Cathy Keating as the keynote

(continued on next page)



Pictured at the "Hats Off ta Wamen's Health" meeting in Okmulgee an September 24-25, 1997, are Mark Janes, Okmulgee Caunty Administratar; First Lady Cathy Keating; and OSMA physician R.D. Miller, MD, fram Okmulgee Caunty.

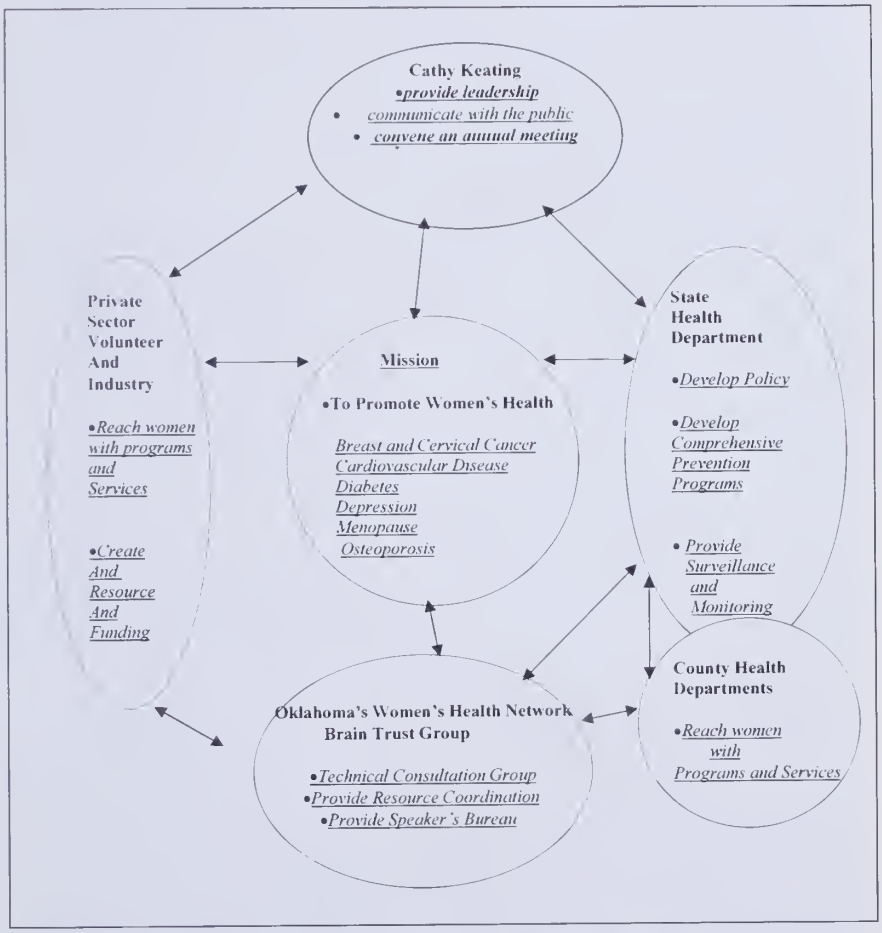


Table. Rales and Respansibilities af the Oklahama Wamen's Health Netwark

Poison Control Center

Essential Oils

Essential oils are volatile odorous mixtures of esters, aldehydes, alcohols, and ketones derived from plant products and have been used for centuries as topical rubefacients and counter-irritants for analgesic and antipruritic purposes. After topical application, essential oils produce inflammation followed by a feeling of comfort. They may appear alone as herbal remedies for the relief of headaches, toothaches, and the common cold or may be present as combinations in liniments, vaporizer solutions, skin analgesics, and cold preparations. Essential oil concentrations may range from 1% to 20% in commercial preparations and doses of 5 to 15 ml should be considered potentially toxic.



Of the essential oils available commercially, camphor may pose the most dangerous threat in overdose situations. It is rapidly absorbed from the skin and gastrointestinal and respiratory tracts, causing restlessness, excitement, delirium, and rapid onset seizures. Its mechanism of toxicity is unknown, with dangerous doses ranging from 50 to 500 mg/kg. Serious poisonings and death have occurred in children with as little as one gram (10ml of Campho-Phenique). Patients with ingestions of less than 35mg/kg usually remain asymptomatic. Treatment to reduce absorption should be instituted immediately if a toxic dose is suspected. There is no antidote. The camphor content of some common products are Campho-Phenique liquid(10.8%), Vicks Vaporub(4.73%), Mentholatum(9.0%), and Vaposteam (6.2%).

Oil of wintergreen offers the threat of severe, rapid onset salicylate toxicity because of its liquid concentrate form. Wintergreen oil (methyl salicylate) can be 98% pure and would be equivalent to forty-two 325mg aspirin tablets per 10ml of oil. Fortunately, most available products contain 30% or less but remain a threat to children. Doses of 150 to 200mg/kg of salicylate equivalent should be considered toxic.

Excessive doses of other essential oils are irritating to mucous membranes and to the gastrointestinal tract, causing nausea, vomiting, and diarrhea with the possibility of central nervous system depression or stimulation. Some oils that might present a toxicity problem are:

- Cinnamon—Antigen, very irritating
- Clove oil—Clove cigarettes. Tracheobronchitis and hemoptysis
- Eucalyptus oil—Very dangerous oil but poisonings are rare. Fatalities have occurred from 4ml to 400ml. Rapid CNS depression and cardiovascular collapse
- Myristica oil—Psychogenic effects with 2 to 4 teaspoonsful of ground nutmeg or equivalent
- Pennyroyal oil—Hepatic necrosis and fatal coma (not widely available)
- Peppermint oil—Mostly menthol. Phenol-like effects
- Sassafras oil—Hepatotoxic
- Terpene oils—15ml is toxic in children

Essential oils may be encountered in practice with those patients who dabble in folk medicine or the more recent therapies involving aromatherapy. The physician should be alert to the possible toxic effects of these very common pharmaceutical preparations.

For more information, contact the Oklahoma Poison Center at 271-5454 (OKC area) or 1-800-POISON-1 (1-800-764-7661).

—G.K. Stanton

From the OSDH *(continued)*

speaker on the first evening and then a humorist keynoted the following morning. Their agenda included the "Hats Off to Health" skit with women from the audience participating and women giving testimony on surviving breast or cervical cancer.

Moore: In Moore, the community planned a focused topic event: a two-hour presentation on osteoporosis.

The Advisory Council is planning an annual meeting to be held in January 1998 to follow-up the present activities and to assist groups with planning efforts. During 1998, the Advisory Council will launch three major public awareness events focusing on cardiovascular disease, osteoporosis, and depression. Each effort will include new partnerships. If you would like to know the names of the people from your county who attended the January 1997 conference at the Governor's Mansion, please contact Mary Massey-Douglas, MPH, Chronic Disease Service, Oklahoma State Department of Health, (405) 271-4072.

For additional information, please contact the following: Montez Mutzig, MD, Tulsa Internist (918) 838-4787; Adeline Yerkes, RN, MPH, Chief, Chronic Disease Service, Oklahoma State Department of Health (405) 271-4072; or Sara Reed DePersio, MD, MPH, Deputy Commissioner for Personal Health Services, Oklahoma State Department of Health (405) 271-4200.

1. Resolution 12: Women's Health (Adopted). *J Okla State Med Assoc*. Vol. 90, No. 6, July/August 1997

Letters

OCIHO Chairman Deckert replies to Dewberry letter

Dear Editor: I am responding to a letter published in the May/June and July/August 1997 issues [JOURNAL] written by a colleague, Glen P. Dewberry, M.D. I agree with his concluding paragraph. I believe the Board and the membership of OCIHO would agree as well.

> "Improving the State of the State's Health is a worthy goal. It is a reachable goal, as well, as long as the OCIHO focuses on making decisions and recommendations based on accurate data rather than based on promoting a particular social political agenda."

OCIHO has officially adopted a strategy statement where it speaks specifically to the principle of having a *data*

driven orientation and functioning as a facilitating organization.

The conclusions in the State of the State's Health report were three and three only. (1) "Unnecessary disability and loss of life: 'Oklahoma has the unfortunate distinction of being above national rates for most of the key public health status indicators. This means that our citizens are over burdened with disability and unnecessary death...' " (2) "Uninsured: Augmenting the problems of our excessive disease and death rates is the continuing high number of uninsured people in the state. For those without health insurance, public or private, and with no other means to pay, basic health care is neglected..." (3) "Neglect of health care for children: Our most vulnerable citizens are also our youngest. Children are at risk for numerous infectious diseases and unintentional injuries. Poor health care among the young predicts a higher rate of chronic disease among the working adult population." The data lead directly to these conclusions.

The report makes one and one recommendation only, namely, the creation of the "Oklahoma Consortium for Improving the Health of Oklahoma (OCI-HO)." This single recommendation is based on the premise that improving the health of Oklahoma must come from a much broader base than either the State Board of Health or the Oklahoma State Department of Health, I would add, or the Legislature or the Governor's Office or the State Medical Association or the State Chamber of Commerce, etc., etc.

The report does speak to the need of *assuring* "access to quality health care services for Oklahomans." It does not speak to *how* such assurance could or should be obtained. The Board in its actions to date, in its policy statements to date, and in its report to the people of Oklahoma does not promote "a particular social political agenda." Dr. Dewberry says he hears "a call for universal health care coverage." Access to health care and universal health care coverage are not synonymous, at least as the terms are usually used. I would suggest that Dr.

(continued on next page)

Changes in Your Medicare Pay

For 1998, the new Medicare law maves ta a single canversian factor, likely $37.13, and redistributes up to $390 million from hospital-based to office-based cades. The government's proposed 1998 payment rule increases the wark relative value units of evaluatian and management cades far glabal surgical services.

Here are the AMA's specialty-by-specialty draft estimates af the payment impact af these major policy changes

Specialty	Total change	Single CF and update	Practice expense	Global surgical E&M
Generol practice	6 7%	5.2%	1.7%	-0.2%
Fomily practice	7 5	5.5	2.2	-0.3%
Cardiology	7.2%	8.4%	-0.9%	-0.2%
Gostroenteralogy	5.9	8.9	-2.4	-0.3
Internol medicine	8.0	6.9	1.4	-0.3
Neuralagy	8.8	8.3	0.7	-0.3
Pulmanary disease	8.5	8.6	0.3	-0.3
Nephralagy	5.7	6.5	-0.4	-0.3
Rheumotalagy	8.1	6.0	2.4	-0.3
Hematalagy/Oncalogy	8.8	7.6	1.6	-0.3
Other Medicine	8.0	7.0	1.2	-0.2%
General surgery	-1.7%	-3.6%	-0.0%	2.1%
Otaloryngalogy	1.1	0.0	0.7	0.3
Neurasurgery	-5.1	-5.3	-1.5	1.6
Obstetrics-gynecalagy	0.5	-2.2	1.7	1.1
Ophthalmalagy	-4.7	-2.7	-3.1	0.8
Orthapedic surgery	-3.2	-4.4	-0.7	1.9
Plastic surgery	-4.6	-6.6	-0.0	2.1
Thoracic surgery	-7.6	-6.4	-2.8	1.4
Urolagy	-1.7	-3.0	0.7	0.7
Voscular surgery	-1.9	-3.7	-0.1	2.1
Cardiac surgery	-10.0	-7.7	-3.8	1.2
Other surgery	-0.5	-1.4	-0.5	1.6%
Anesthesiology	3.2%	3.5%	0.0%	-0.3%
Dermatology	-3.5	-4.6	0.9	-0.2
Pathalogy	8.9	9.6	-0.3	-0.3
Physicol medicine ond rehabilitotian	8.8	8.8	0.3	-0.3
Psychiotry	9.2	9.4	0.1	-0.3
Diagnostic rodiology	9.0	9.3	-0.0	-0.3
Clinic/group proctice	5.2	5.0	0.3	0.0
Radiation oncalagy	9.3	9.5	0.0	-0.3
Emergency medicine	4.1	4.2	0.0	-0.2
Other physician	8.2	8.4	0.0	-0.2%
All specialties	3.6%	3.6%	0.0%	0.0%

Sources: AMA Center for Health Policy Reseorch droft anolysis

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Dewberry's hearing such a call does not come from the report per se.

However, with this one exception, I'm in agreement with the remainder of Dr. Dewberry's communication. I am familiar with most of the references he quotes. As Chair of OCIHO I welcome his interest and involvement. As a member of OSMA, I'm pleased with the active participation of our organization in this endeavor.

—Gordon H. Deckert, MD
David Ross Boyd Professor Emeritus;
Chair, Public Health Policy
Committee, Board of Health; and
Chair, OCIHO

Thorazine in 1909?

To the Editor: The short story "The Lady of Windmere" [JOURNAL, Sept./Oct. '97] was very interesting, even if the facts were severely stretched. The brass marker on her grave read HAZEL: THE LADY OF WINDMERE 1884-1969. The article stated that she was "doomed to a life of chemical lobotomy. Sixty years of daily Thorazine injections. Sixty years of a foggy existence."

1969 less sixty years is 1909. Thorazine in 1909—you are kidding. I am not sure exactly when Thorazine came on the market, but it was after 1950. There is a limit to how far one can stretch the facts and still be believable, even as fiction which this story surely must be.

—Arthur E. Schmidt, MD
Oklahoma City

OSMA Journal 'of real significance'

To the Editor: The April 1997 issue of the state journal comes to my attention again, and the contents seem to me to include an assortment of reports that are all of real significance to physicians in Oklahoma. I would like to take this opportunity to commend you, Susan F. Records, and all the rest of your staff in the excellent work you do in putting out our journal. The awards the JOSMA has won are well deserved.

Keep up the good work.

—S. Fulton Tompkins, MD
Oklahoma City

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Your information connection to OSMA and the Internet

DEATHS

William Archibald Betts, Jr., MD
1911 - 1997

William A. Betts, MD, retired Tulsa pediatrician, died October 8, 1997, in Tulsa. Dr. Betts, a native of White Springs, Fla., earned his medical degree in 1946 from the University of Texas, Galveston. He served residencies in both Michigan and South Carolina before moving to Tulsa as a second-year resident in pediatrics. After completing his studies he moved to Houston, Tex., where he practiced until 1960, before returning to Tulsa to practice until 1996. Dr. Betts was a veteran of the U.S. Army, having served on active duty as a medical officer both in the U.S. and in the Philippines during World War II.

Gifford Harold Henry, MD
1927 - 1997

OSMA Life Member Gifford H. Henry, MD, a retired general surgeon from Tulsa, died October 12, 1997. A 1927 graduate of the University of Illinois School of Medicine, Dr. Henry served his internship in the U.S. Navy during World War II and saw active duty in San Diego, the Solomons, and the Philippines.

Jake Jones, Jr., MD
1921 - 1997

Shawnee native Jake Jones, Jr., MD, died September 28, 1997. He had been a Life Member of OSMA since 1987. Jones served in the U.S. Army Air Force as a major during World War II. Afterwards, he enrolled at the University of Oklahoma School of Medicine, where he was graduated in 1954. He completed his internship and residency in pediatrics at Cincinnati Children's Hospital and then returned to Shawnee to practice. In the 1960s he helped found what is now the Shawnee Regional Medical Center and Clinic.

George Arthur Martin, MD
1937 - 1997

Ponca City orthopedic surgeon George A. Martin, MD, died September 10, 1997, in Oklahoma City. Dr. Martin was born in Berlin, New Hampshire, and earned his medical degree at Baylor University College of Medicine, Houston, in 1966. He completed his internship at St. Anthony Hospital in Oklahoma City and his residency at the University of Oklahoma Health Sciences Center. His residency was interrupted from 1968 to 1970 while he served in the U.S. Air Force. Dr. Martin established his Ponca City practice in bone and joint surgery on July 1, 1972. He was a staff member at St. Joseph Medical Center, where he served as treasurer, secretary, vice-president, and chief of staff, as well as two years as chief of surgery. While in the service he received a meritorious service medal for establishing new medical treatment clinics and procedures. He was the first course instructor in Oklahoma for the EMT Trauma Research Society in 1978 and 1979.

Index to 1997 Contents

Volume 90, Numbers 1-8

Index to Pages

1-40 January
41-84 February
85-128 March
129-172 April
173-212 May June
213-352 July August
353-424 September October
425-480 November December

The Author Index is in a separate section following the Subject Index.

SUBJECT INDEX

-A-

accreditation
Accreditation: who's counting? Oehlert WH, Ketring SD, 48

alcohol consumption
Alcohol consumption among Oklahoma Women: before and during pregnancy. Cloud SJ, Baker KM, DePersio SR, DeCoster EC, Lorenz RR, 10

ALLIANCE, 39, 83, 127, 171, 211, 423, 478

Annual Meeting
Call for resolutions, 70
First call for resolutions, 31
Index to proceedings, 262
Official call, 70
Proceedings, 259
Registration information, 103
Tentative meeting schedule, 71

arthritis
Acute infectious arthritis. Stafford HA, 359

-C-

CAPSULES, 32, 74, 468

cardiovascular project
Cooperative cardiovascular project in Oklahoma. Bratzler DW, DeLeon AC Jr, Johnson MC, Ohelert WH, Slagle RC, Murray CK, Bumpus LJ, Webb J, 219

CLASSIFIEDS, 32, 76, 118, 163, 203, 344, 415, 470

COMMENTARY
Essay on managed care and the patient-physician relationship. Grana WA, 450

cytomegalovirus
Ganciclovir treatment of systemic cytomegalovirus in an immunocompetent host. Leman JS, Toalson TW, Wlodaver CG, 367

-D-

DEATHS
Barlow, Ronald S, MD, 31
Benson, Charles Leonard, MD, 31
Betts, William Archibald, Jr., MD, 464
Brown, Bruce Hunter, MD, 75
Brown, Bruce Hunter, MD, 118
Davis, Kieffer Dixon, MD, 31
Gaston, Benjamin Howard, MD, 343
Gilchrist, Ronald Wallace Jr., MD, 75
Harsha, William Norris, MD, 31
Henderson, Joseph Sansted, MD, 344
Henry, Gifford Harold, MD, 464
Hensley, Jess, MD, 163
Johnson, Dale Gustaf, MD, 344
Jones, Jake, Jr., MD, 464
Kalmon, Edmond Herman, Jr., MD, 343
Koger, Edward Leroy, MD, 344
Lindstrom, William Carl, MD, 344
Martin, George Arthur, MD, 464
Moore, William Manning, MD, 31
Neel, Roy Lawrence, MD, 203
O'Leary, Charles Marion, MD, 344
Pollnow, Robert Edward, MD, 163
Rutherford, Vester Meade, MD, 203
Scivally, Kenneth, Rex, MD, 118
Steelman, Gerald Matthew, MD, 415
Tomsovic, Edward J., MD, 31
Williams, George Rainey, MD, 203
Yandell, Hays Richman, MD, 118

In Memoriam

1996

William Allen Heflin, MD August 3
Bruce Hunter Brown, MD August 4
Arnold Gordon Nelson, MD August 26
Ollie Wayne Dehart, MD August 28
Leslie Arvin Arneson September 26
Bertram Edward Sear, MD October 4
Walter Wicker, Jr., MD October 11
Ellis Edwin Fair, MD October 21
William Nathan Oxley, MD October 22
Jesse Day Shipp, MD October 28
William Manning Moore, MD November 28
Charles Leonard Benson, MD December 8
William Norris Harsha, MD December 17
Ronald S. Barlow, MD December 21

1997

Edward J. Tomsovic, MD January 2
Ronald W. Gilchrist, Jr., MD January 19
Kenneth Rex Scivally, MD February 8
Hays Richman Yandell, MD February 19
Robert Edward Pollnow, MD March 2
Jess Hensley, MD March 25
Vester Meade Rutherford, MD April 7
George Rainey Williams, MD April 20
Benjamin Howard Gaston, MD May 14
Roy Lawrence Neel, MD May 19
William Carl Lindstrom, MD May 21
Joseph Sansted Henderson, MD May 26
Charles Marion O'Leary, MD June 22
Dale Gustaf Johnson, MD June 24
Edmond Herman Kalmon, Jr., MD June 24
Edward Leroy Koger, MD June 30
Gerald Matthew Steelman, MD August 29
George Arthur Martin, MD September 10
Jake Jones, Jr., MD September 28
William Archibald Betts, Jr., MD October 8
Gifford Harold Henry, MD October 12

disc, herniated
Herniated intervertebral disc without pain. Gorman WA, Hodak JA, 185

-E-

EDITORIALS *see also* **PRESIDENT'S PAGE** *and* **COMMENTARY**
An open letter to Senator Don Nickles. McIntyre RV, 87
Communication is a difficult art. McIntyre RV, 175
Insurance crusade. McIntyre RV, 3
Just an ACT. McIntyre RV, 131
On managed care. McIntyre RV, 215
Telemedicine: Threat or Promise. McIntyre RV, 427
Unanimous Supreme Court. McIntyre RV, 355
Warning: spring flooding. McIntyre RV, 43

-H-

Hassle factor log, 413, 469

headache
Headache fear. Saadah HA, 173

HEALTH DEPARTMENT
A 1997 Mother's Day message for your patients: "Folic acid—make it a habit," 114
Alcohol consumption among Oklahoma Women: before and during pregnancy. Cloud SJ, Baker KM, DePersio SR, DeCoster EC, Lorenz RR, 10
Animal rabies significantly increasing in Oklahoma: 27 cases confirmed this year, 159
Hemophilia surveillance project, 71
Immunizations for children are covered, 458
Infectious diseases: an increasing health threat, 161
Legislative success: the Child Abuse Training and Coordination Council, 404
Partnership outcomes related to 1997 OSMA resolution on women's health, 460
Perinatal characteristics of women in Oklahoma: a comparison of communities, 395
Remember, measles is a reportable disease! 459
Questions about diabetes and insurance coverage, 161
SIDS in Oklahoma down 40% in last five years, 115
State HIV/AIDS cases reach 2622, 73
Unwanted pregnancy in Oklahoma, 400
Update on hepatitis C virus (HCV) infection, 458

health care
It takes a revolution: restoring the balance in health care. Wooten P, 191

health insurance
Fraud and abuse provisions in the Health Insurance Portability and Accountability Act: a guide to the new act for physicians. McCampbell RG, 139
Report of the Ad Hoc Committee on the Oklahoma Health Care Authority and SoonerCare, 195

hemangioma
Cellular hemangioma of the posterior mediastinum: unusual presentation of a rare vascular neoplasm. Parker JR, Knott-Craig C, Min KW, Uzelmeier WJ, 7

-I-

IN MEMORIAM, 30, 75, 118, 163, 204, 343, 415, 465

INSTRUCTIONS FOR AUTHORS, 32, 76, 120

-L-

LAST WORD, THE, 40, 84, 128, 172, 212, 352, 424, 480

LETTERS
A call for universal health coverage, 199
A call for universal health coverage? [correction], 342
Clarification of state HMO-Medicaid, 200
CME requirements draw comment, 110
More on MRI of lightning injury, 74
OCIHO Chairman Deckert replies to Dewberry letter, 462
On Nickles letter and Medicare benefits, 200

Lisle, A.C., Jr.
Leaders in medicine: A.C. Lisle, Jr., MD: the best of the bunch. Green R, 383

-M-

managed care
Euphemism in the language of managed care. Stein HF, 243
Managed health care: a concept not understood by rural Oklahomans. StClair CF, Doeksen GA, Perry RR, Rauh MJ, Mowen JC, 18
Professional resistance to managed care in Oklahoma: an issue of quality. Perry R, Pontious JM, 236
Essay on managed care and the patient-physician relationship. Grana WA, 450

Medicaid
Medicaid: a comparison of Oklahoma and surrounding states, 1990-1994. Brandt EN, Broyles R, 135

Munnell, Edward R.
Learning curves: Leaders in Medicine—Edward R. Munnell, MD. Green R, 41

-N-

NEWS
AMA finds questions still lingering in wake of Sunbeam deal, 455
American Medical Association celebrates Women in Medicine Month, 337
Association grateful to exhibitors and sponsors of '97 Annual Meeting, 158
Brian O. Foy to become OSMA's executive director in January, 453
Changes in your Medicare pay, 463
Elkins receives Dean's Award, 70
Enid's David M. Selby, MD, assumes presidency of OSMA on April 26, 157
Gov. Frank Keating signs new Oklahoma CME requirements into law, 341
New endowed positions at OUHSC honor Rainey Williams, Doss Lynn, 27
New seat belt law says buckle up or be stopped and ticketed, 415
OHCA responds to OSMA's concerns and resolutions on SoonerCare, 335
Oklahoma adopts more stringent laws governing telemedicine practice, 157
Oklahoma capitol contacts—1997 Legislative session, 67
Oklahoma Telemedicine Act, 457
Oklahoma's new Do-Not-Resuscitate Act has been in effect since Nov.1, 453
OSMA Hassle Factor Log: helping you to help yourself, 412
Report to the Board of Trustees from the OSMA Delegation to the AMA, 339
Rite of spring: corrections are issued for '97 OSMA physicians' directory, 117
Rural health association plans March meeting in Seattle, 28
Sponsors and exhibitors are indispensable for successful meeting, 110
Telemedicine presents new malpractice concerns according to physician insurers association, 101
Telemedicine raises new liability concerns for doctors, 27
White Coat Ceremony becomes newest tradition at OU, 407
Who gets copies of medical records? 197
Your voice in Washington, 67

non-Hodgkin's lymphoma
Studying non-Hodgkin's lymphoma in two Oklahoma counties: a call for centralized cancer data management. Bartlett ES, Pontious JM, 370

-O-

Oklahoma Poison Control Center *see* **POISON CONTROL CENTER**

Oklahoma State Department of Health *see* **HEALTH DEPARTMENT**

-P-

Physician's Recognition Award
AMA Physician's Recognition Award—a tool for your education, efficiency, and success. Sheldon RE, 111

POISON CONTROL CENTER
Anesthesia in a glass, 158
DHEA... friend or foe? 412

Essential oils, 462
Herbals in your practice? 30
Mycetismus, 412
National accreditation is important to any poison control center, 116
Summertime... and the livin' is dangerous, 196

polio vaccines
Change offers children the best of both polio vaccines. Okla St Dept Health & CDC, 142

PRESIDENT'S PAGE
Banner year at the State Capitol. Selby DM, 177
First 100 days. Selby DM, 217
Healthcare reform—our input. Harper DL, 44
It was a very good year. Selby DM, 429
Political participation—review for 1997. Harper DL, 5
The practice of medicine is a privilege. Selby DM, 133
Thoughts for the future. Harper DL, 88
White coat ceremony. Selby DM, 357

pulmonary problems
Seventy-year-old man with pulmonary problems and renal failure: a clinicopathologic correlation conference from the University of Oklahoma College of Medicine. Kinasewitz G, Fine D, Good TD, Eaton B, Silva F, Hudson B, 431

-R-

renal failure
Seventy-year-old man with pulmonary problems and renal failure: a clinicopathologic correlation conference from the University of Oklahoma College of Medicine. Kinasewitz G, Fine D, Good TD, Eaton B, Silva F, Hudson B, 431

-S-

scaphoid fractures
Scaphoid fractures in soccer goalkeepers. Green Jr JR, Rayan GM, 45

SCIENTIFIC
Acute infectious arthritis. Stafford HA, 359
Cellular hemangioma of the posterior mediastinum: unusual presentation of a rare vascular neoplasm. Parker JR, Knott-Craig C, Min KW, Uzelmeier WJ, 7
Cooperative cardiovascular project in Oklahoma. Bratzler DW, DeLeon AC Jr, Johnson MC, Ohelert WH, Slagle RC, Murray CK, Bumpus LJ, Webb J, 219
First *in situ* split of a liver in the USA performed by two geographically distant transplant centers—enhancing, sharing, and expanding the cadaveric liver organ pool. Katz E, Miller CM, Nour B, Schwartz ME, Sebastian A, Emre S, 442
Ganciclovir treatment of systemic cytomegalovirus in an immunocompetent host. Leman JS, Toalson TW, Wlodaver CG, 367
Headache fear. Saadah HA, 173
Herniated intervertebral disc without pain. Gorman WA, Hodak JA, 185
Living related liver transplantation in Oklahoma. Negita M, Nour B, Sebastian A, Griggs JR, Torres-Pinedo RB, Wright HI, Katz E, 89
Methicillin-resistant staphylococcus aureus at a Veterans Affairs medical center. Flournoy DJ, 228
Scaphoid fractures in soccer goalkeepers. Green Jr JR, Rayan GM, 45
Seventy-year-old man with pulmonary problems and renal failure: a clinicopathologic correlation conference from the University of Oklahoma College of Medicine. Kinasewitz G, Fine D, Good TD, Eaton B, Silva F, Hudson B, 431
Studying non-Hodgkin's lymphoma in two Oklahoma counties: a call for centralized cancer data management. Bartlett ES, Pontious JM, 370
Vaginal birth after cesarean section: a comparison of rural and metropolitan rates in Oklahoma. Sieck CC, 444

short story
Lady of Windmere: a short story. Edde RR, 392

smoking
Smoking in Oklahoma: the seven-year trend. Hann N, Asghar A, 94

SPECIAL
Accreditation: who's counting? Oehlert WH, Kctring SD, 48
Alcohol consumption among Oklahoma Women: before and during pregnancy. Cloud SJ, Baker KM, DePersio SR, DeCoster EC, Lorenz RR, 10
AMA Physician's Recognition Award—a tool for your education, efficiency, and success. Sheldon RE, 111
Change offers children the best of both polio vaccines. Okla St Dept Health & CDC, 142
Euphemism in the language of managed care. Stein HF, 243
Fraud and abuse provisions in the Health Insurance Portability and Accountability Act: a guide to the new act for physicians. McCampbell RG, 139
Immunization of health care workers with varicella vaccine. AMA Council on Scientific Affairs, 376
It takes a revolution: restoring the balance in health care. Wooten P, 191
Lady of Windmere: a short story. Edde RR, 392
Leaders in medicine: A.C. Lisle, Jr., MD: the best of the bunch. Green R, 383
Learning curves: Leaders in Medicine—Edward R. Munnell, MD. Green R, 41
Managed health care: a concept not understood by rural Oklahomans. StClair CF, Doeksen GA, Perry RR, Rauh MJ, Mowen JC, 18
Medicaid: a comparison of Oklahoma and surrounding states, 1990-1994. Brandt EN, Broyles R, 135
Professional resistance to managed care in Oklahoma: an issue of quality. Perry R, Pontious JM, 236
Report of the Ad Hoc Committee on the Oklahoma Health Care Authority and SoonerCare, 195
Smoking in Oklahoma: the seven-year trend. Hann N, Asghar A, 94
State of the State's Health: a report from the Oklahoma State Board of Health, 150
Telemedicine: Oklahoma adopts strict new licensure rules for medical treatment employing electronic communication. Fisher ES, 201

staphylococcus aureus
Methicillin-resistant staphylococcus aureus at a Veterans Affairs medical center. Flournoy DJ, 228

state of the state's health
State of the State's Health: a report from the Oklahoma State Board of Health, 150

Statement of ownership, 470

-T-

telemedicine
Telemedicine: Oklahoma adopts strict new licensure rules for medical treatment employing electronic communication. Fisher ES, 201

transplantation
First *in situ* split of a liver in the USA performed by two geographically distant transplant centers—enhancing, sharing, and expanding the cadaveric liver organ pool. Katz E, Miller CM, Nour B, Schwartz ME, Sebastian A, Emre S, 442
Living related liver transplantation in Oklahoma. Negita M, Nour B, Sebastian A, Griggs JR, Torres-Pinedo RB, Wright HI, Katz E, 89

-V-

vaginal birth after cesarean section (VBAC)
Vaginal birth after cesarean section: a comparison of rural and metropolitan rates in Oklahoma. Sieck CC, 444

varicella vaccine
Immunization of health care workers with varicella vaccine. AMA Council on Scientific Affairs, 376

-W-

WORTH REPEATING
How to avoid Medicare's implosion. Gramm P, 101

AUTHOR INDEX

AMA Council on Scientific Affairs. Immunization of health care workers with varicella vaccine, 376
Baker KM *see* Cloud SJ

1997 Index *(continued)*

Bartlett ES, Pontious JM. Studying non-Hodgkin's lymphoma in two Oklahoma counties: a call for centralized cancer data management, 370
Brandt EN, Broyles R. Medicaid: a comparison of Oklahoma and surrounding states, 1990-1994, 135
Bratzler DW, DeLeon AC Jr, Johnson MC, Ochlert WH, Slagle RC, Murray CK, Bumpus LJ, Webb J. Cooperative cardiovascular project in Oklahoma, 219
Broyles R *see* Brandt EN
Bumpus LJ *see* Bratzler DW
Cloud SJ, Baker KM, DePersio SR, DeCoster EC, Lorenz RR. Alcohol consumption among Oklahoma Women: before and during pregnancy, 10
DeCoster EC *see* Cloud SJ
DeLeon AC Jr *see* Bratzler DW
DePersio SR *see* Cloud SJ
Doeksen GA *see* StClair CF
Eaton B *see* Kinasewitz G
Edde RR. Lady of Windmere: a short story, 392
Emre S *see* Katz E
Fine D *see* Kinasewitz G
Fisher ES. Telemedicine: Oklahoma adopts strict new licensure rules for medical treatment employing electronic communication, 201
Flournoy DJ. Methicillin-resistant staphylococcus aureus at a Veterans Affairs medical center, 228
Good TD *see* Kinasewitz G
Gorman WA, Hodak JA. Herniated intervertebral disc without pain, 185
Grana WA. Essay on managed care and the patient-physician relationship, 450
Green JR Jr, Rayan GM. Scaphoid fractures in soccer goalkeepers, 45
Green R. Learning curves: Leaders in Medicine—Edward R. Munnell, MD, 41
Green R. Leaders in medicine: A.C. Lisle, Jr., MD: the best of the bunch, 383
Griggs JR *see* Negita M
Hann N, Asghar A. Smoking in Oklahoma: the seven-year trend, 94
Hodak JA *see* Gorman WA
Hudson B *see* Kinasewitz G
Johnson MC *see* Bratzler DW
Katz E, Miller CM, Nour B, Schwartz ME, Sebastian A, Emre S. First *in situ* split of a liver in the USA performed by two geographically distant transplant centers—enhancing, sharing, and expanding the cadaveric liver organ pool, 442
Ketring SD *see* Oehlert WH
Kinasewitz G, Fine D, Good TD, Eaton B, Silva F, Hudson B. Seventy-year-old man with pulmonary problems and renal failure: a clinicopathologic correlation conference from the University of Oklahoma College of Medicine, 431
Knott-Craig C *see* Parker JR
Leman JS, Toalson TW, Wlodaver CG. Ganciclovir treatment of systemic cytomegalovirus in an immunocompetent host, 367
Lorenz RR *see* Cloud SJ
McCampbell RG. Fraud and abuse provisions in the Health Insurance Portability and Accountability Act: a guide to the new act for physicians, 139
Miller CM *see* Katz E
Min KW *see* Parker JR
Mowen JC *see* StClair CF
Murray CK *see* Bratzler DW
Negita M, Nour B, Sebastian A, Griggs JR, Torres-Pinedo RB, Wright HI, Katz E. Living related liver transplantation in Oklahoma, 89
Nour B *see* Negita M
Nour B *see* Katz E
Oehlert WH, Ketring SD. Accreditation: who's counting? 48
Oehlert WH *see* Bratzler DW
Parker JR, Knott-Craig C, Min KW, Uzelmeier WJ. Cellular hemangioma of the posterior mediastinum: unusual presentation of a rare vascular neoplasm, 7
Perry R, Pontious JM. Professional resistance to managed care in Oklahoma: an issue of quality, 236
Perry RR *see* StClair CF
Pontious JM *see* Perry R
Pontious JM *see* Bartlett ES
Rauh MJ *see* StClair CF
Rayan GM *see* Green Jr JR
Saadah HA. Headache fear, 173
Schwartz ME *see* Katz E
Sebastian A *see* Katz E
Sebastian A *see* Negita M
Sheldon RE. AMA Physician's Recognition Award—a tool for your education, efficiency, and success, 111
Sieck CC. Vaginal birth after cesarean section: a comparison of rural and metropolitan rates in Oklahoma, 444
Silva F *see* Kinasewitz G
Slagle RC *see* Bratzler DW
Stafford HA. Acute infectious arthritis, 359
StClair CF, Doeksen GA, Perry RR, Rauh MJ, Mowen JC. Managed health care: a concept not understood by rural Oklahomans, 18
Stein HF. Euphemism in the language of managed care, 243
Toalson TW *see* Leman JS
Torres-Pinedo RB *see* Negita M
Uzelmeier WJ *see* Parker JR
Webb J *see* Bratzler DW
Wlodaver CG *see* Leman JS
Wooten P. It takes a revolution: restoring the balance in health care, 191

Capsules

■ **Effective November 5, physicians can earn continuing** medical education credit for reading *The Journal of the American Medical Association (JAMA). JAMA* readers may obtain one Category 1 credit applicable to the AMA Physicians Recognition Award as well as most state licensing bodies and specialty societies that have a CME requirement. The program requires that applicants complete a questionnaire on three *JAMA* articles and fax it to a verification service, which will in turn issue a credit certificate. Announcement of the new program was made by *JAMA* Editor George D. Lundberg, MD.

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Time spent on problem: Staff time (hours)_____ Physician Time (hours)_____

Type of problem: (circle all that apply)

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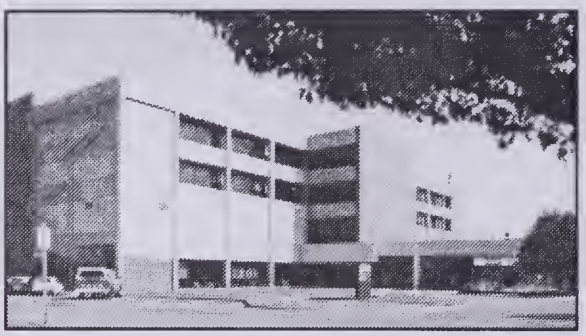
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Membership with a Mission: OSMA Alliance

The 1997-98 Board of Directors of the AMA Alliance created a definitive statement to describe our organization and what we represent. "The mission of the AMA Alliance is to be the proactive volunteer voice of the American Medical Association promoting the good health of America and supporting the family of medicine." Thus your membership in the AMA Alliance and OSMA Alliance will not only link you to other medical families but will give you the opportunity to improve America's health. We participate in community education, raise money for medical education, advocate medical legislation, and combat America's number one preventable threat: Violence.

Your membership in the OSMA Alliance enables you to participate in the SAVE program: Stop America's Violence Everywhere. Violence has been termed our nation's number one health crisis by the AMA. This program was launched by the AMAA in 1995 and has become a focus in the area of health promotion for the OSMA Alliance as well as many of our county groups.

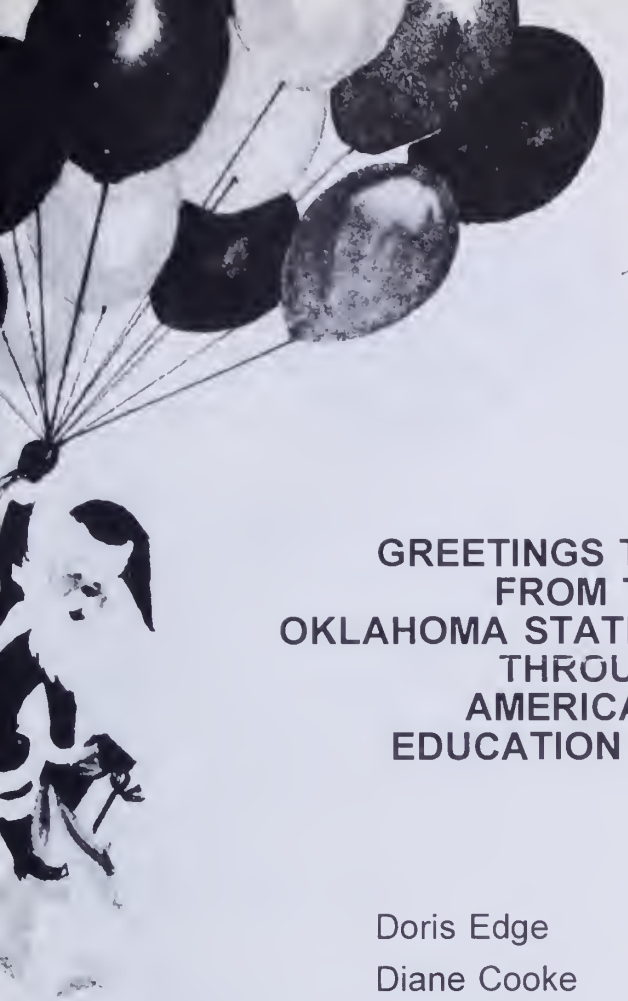
Your membership in the OSMA Alliance could also enable you to become active in the area of legislation where our support is definitely needed. There are several "managed care bills" that will come before the Oklahoma Legislature this session, and the OSMA Alliance in conjunction with county groups will be addressing legislative awareness. We can and do provide the educational opportunities that bring together legislators, physicians, and alliance members.

Your membership in the OSMA Alliance provides the opportunity to improve medical education in our state. The AMA Education and Research Foundation raised over $1.3 million for the 1996-97 year. Our own OSMA Alliance contributed over $32,000 to this foundation that assures loans, scholarships, and grants for Oklahoma medical students and funds for Oklahoma medical schools to purchase equipment to educate these future physicians.

Your OSMA Alliance membership will also enable you to have access to excellent publications in the areas of health promotion, marketing membership, legislative advocacy and national publications such as *Newsline* and the OSMAA *Sooner Physicians Heartbeat.*

Your OSMA Alliance membership is an important and valuable investment. Join us by becoming a member. Complete and mail the form below or contact Marilyn Fick at the OSMA Alliance Office. Join us in making our alliance one of a membership with a mission!

—Cheryl Baker
Vice-President, Membership



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THE LAST WORD

■ **The American Medical Association's International** Health and Medical Film Competition honored Oklahoma City with the 1997 Phoenix Award at an awards ceremony on November 8 in San Francisco, Calif. Oklahoma County Medical Society (OCMS) President Dr. J. Christopher Carey and OCMS Past-President Dr. John Bozalis joined Oklahoma City Mayor Ron Norick and Firefighter Chris Fields on stage for the taped television ceremony. The proclamation, entitled "A City Healing Itself—Rising from the Ashes," read, in part:

> "Mayor Norick, Americans across this country and, indeed, people around the globe have shared in the shock and grief of the terrorist action in Oklahoma City on April 19th, 1995. They have equally shared in the resilience and conviction of your great citizens to rise above this tragedy."

The Proclamation will be presented to Oklahoma City by Dr. C. Everett Koop, former U.S. Surgeon General, and Dr. John Nelson, a member of the AMA Board of Trustees.

The courage of Oklahoma City citizens also recognized in 1996, when the American Medical Association presented its Medal of Valor to the Oklahoma County Medical Society, for the unselfish and immediate response by all of its membership to the Murrah Building bombing.

■ **Once again physicians are need to serve as "Doctor of** the Day" at the Oklahoma Legislature next session. Tulsa County Medical Society will be taking volunteers for the month of February. The Osteopathic Association will be filling the month of March, and Oklahoma County Medical Society will be accepting volunteers for April. Rural county physicians are encouraged to volunteer for the days in May.

The "Doctor of the Day" is assisted by the "Nurse of the Day" and can expect to see up to 15 patients. Hours are from 9 a.m. to about 4 p.m., Monday through Thursday.

Each "Doctor of the Day" is introduced in the House and Senate by his/her State Representative and State Senator. The "Doctor of the Day" program helps add to the OSMA's presence at the State Capitol; it is also an interesting way to get an up-close look at politics in action.

Tulsa County physicians wishing to volunteer for "Doctor of the Day" for February should contact Paul Patton at TCMS, (918) 743-6184. Oklahoma County physicians wishing to volunteer for April should call Doris Clark at the OCMS, (405) 843-5619. Rural physicians should call Marilyn Fick at OSMA headquarters, 1-800-522-9452 to sign up for May.

■ **"Oklahoma Medicine at the Crossroads" has been an**nounced as the theme of the 1998 Annual Meeting of the OSMA House of Delegates. The meeting will be at the Northwest Expressway Marriott in Oklahoma City April 23-26, 1998. All members are invited to attend and are encouraged to note the dates on their calendars. Watch your *OSMA News*, JOURNAL, and other OSMA mailings for details in the months to come.

■ **The AMA has created a new Division of Representa**tion. This division will provide aggressive representation to physicians who feel powerless to fight abusive health plan practices. These practices range from a lack of input into medical policy and questionable clinical parameters to late payments, gag clauses and inefficient utilization control.

The new division will include a team of lawyers who will work closely with individual physicians who have problems with their health plans. State and county medical societies will also be called upon to assist. "We will go into communities where these problems are happening and work side by side with physicians until their concerns are addressed," said Carol O'Brien, an AMA lawyer who will direct the new division.

The AMA Division of Representation is asking AMA members to report to them the problems they and their patients are encountering with managed care health plans. The Association wants to collect and document managed care's impact on patient care. Areas of specific interest include: (1) Access and denial of care, (2) Inappropriate applications of practice guidelines, (3) Reimbursement and capitation rate trends, (4) Dues process and appeal rights, (5) Contract "gag rule" provisions, (6) Drug formularies, and (7) Denial of payment due to retrospective determination of medical necessity.

Information that is gathered will be used to provide representation to member physicians and local medical societies. Since only physicians can provide the documentation necessary to bring the problem to light, the AMA is counting on members to report these situations. Once informed, the AMA's attorneys, lobbyists and analysts can tailor their advocacy efforts to stop the abuses and effect changes in health plan policies. As a reminder the OSMA Medical Services Council has developed a "Hassle Factor Log" to assist physicians in documenting issues with various third party entities (insurance, Medicare, Medicaid, etc.) The OSMA plans to collect information, identify patterns of issues and develop strategies to respond to these issues. Documentation by physicians will assist the OSMA in identifying the issues. All OSMA members are encouraged to photocopy and use the "Hassle Factor Log" which appears on page 469 of this JOURNAL.was enclosed with the October *OSMA News* and the September/October JOURNAL. For additional information or copies of the Hassle Factor Log call OSMA at 1-800-522-9452 or 843-9571.

■ **Members are reminded that the JOURNAL, while be**ing published less frequently, still needs photographs for its covers. Subject matter should be either scenic Oklahoma or medicine, and vertical formats work best. Both prints and slides are acceptable. An award is given annually by the Editorial Board to the photographer submitting the best cover photo of the year. ℑ



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